TETRA TECH

ANDRE BAKER
PROJECT MANAGER

March 31, 2020

Mr. Jacob Hassan
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Subject: **Letter Report (Revision 0)**
Joliet Chemical Fire PRP Cleanup Site
New Lenox Township, Will County, Illinois
EPA Contract No.: 68HE0519D0005 (START V, Region 5)
Task Order No.: 68HE0519F0069
Task Order Line Item No.: 0002AI001
Document Tracking No.: 0120

Dear Mr. Hassan:

Tetra Tech, Inc. (Tetra Tech) is submitting this letter report summarizing emergency response and removal activities conducted at the Joliet Chemical Fire PRP site located at 20604 Amherst Court in New Lenox Township, Will County, Illinois. Activities took place between August 7 and December 20, 2019.

If you have any questions regarding this report, please contact me at (630) 379-3749 or via e-mail at andre.baker@tetratech.com.

Respectfully,

Andre Baker
Project Manager

Enclosure

cc: TO-TOLIN file
Kevin Scott, Tetra Tech Program Manager

LETTER REPORT
JOLIET CHEMICAL FIRE PRP CLEANUP
NEW LENOX TOWNSHIP, WILL COUNTY, ILLINOIS

Revision 0

Prepared for

U.S. Environmental Protection Agency
Superfund and Emergency Management Division
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Submitted by

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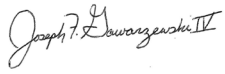

Joseph Gawarzewski
START QC Reviewer

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Appendix

Attachment

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked Tetra Tech Inc. (Tetra Tech) to perform emergency response (ER) and removal activities associated with a fire that occurred on August 3, 2019 at MPG Industries located in New Lenox Township, Will County, Illinois. Emergency response activities were authorized and conducted under EPA Superfund Technical Assessment and Response Team (START) Contract No. EP-S5-13-01, Technical Direction Document No. 0001-1908-002. Removal activities and project reporting were authorized under EPA Contract No. 68HE0519D0005, Task Order (TO) 68HE0519F0069, Task Order Line Item No. (TOLIN) 0002AI001.

As part of emergency response activities, START performed air monitoring, collected air, water, and soil samples, documented site activities, and conducted oversight of limited removal activities.

For removal activities, START assisted with drafting the site-specific health and safety plan and work plans, performed air monitoring, collected soil samples, documented site activities, and conducted oversight of potentially-responsible party (PRP) removal activities. START also prepared a site-specific Air Monitoring Plan (Tetra Tech 2019a) and Sampling and Analysis Plan (Tetra Tech 2019b). Emergency response and removal activities were performed in accordance with the START Quality Assurance Project Plans (QAPP) (Tetra Tech 2016, 2019c).

This letter report is organized into the following sections:

- 1.0 Introduction – describes the objectives and scope of the emergency response and removal actions, in addition to describing the site location and background.
- 2.0 Emergency Response – documents emergency response activities including sampling and oversight of limited removal activities.
- 3.0 PRP-Lead Removal – describes oversight of removal activities, air monitoring, and confirmation soil sampling.
- 4.0 Summary – discusses the effectiveness of the emergency response and removal actions.
- 5.0 References – lists references cited in the report.

In addition, this letter report contains five appendices. Appendix A provides site-related figures. Appendix B provides analytical results summary tables. Appendix C provides representative photographs of site conditions and removal activities conducted at the site. Appendix D provides field notes recorded by START personnel with all personal identifying information redacted. Appendix E provides a summary of site waste disposal. Information on environmentally preferred practices used during this project is included

in Appendix F. Attachment 1 includes a delineation of the impacted area for Affected Property #4. Attachment 2 includes the outreach letter sent to property owners offering potable well water sampling.

1.1 SITE LOCATION

The site is located at 20604 Amherst Court in the Township of New Lenox in Will County, Illinois (Appendix A, Figure 1). The geographic coordinates at the center of the site are latitude 41.512891 degrees north and longitude -88.019438 degrees west (as measured at the approximate center of the site). The site is approximately 656 feet above mean sea level and consists of a single 1.4-acre parcel, identified as parcel number 1508183010250000.

The site is within a mixed commercial, agricultural, and industrial area. The site is border to the north by Interstate 80 (I-80; Affected Property #3), followed by an agricultural field (Affected Property #4); to the east by an operational commercial building (Affected Property #1), followed by additional industrial and commercial properties; to the south by an operational commercial building (Affected Property #2), followed by additional commercial properties; and to the west by an empty lot (parcel number 1508183020070000), followed by a mixture of commercial and industrial properties (Appendix A, Figure 2).

1.2 INITIAL SITUATION

On August 3, 2019, a structural fire occurred at MPG Industries (the site), a chemical plant that manufactured, packaged, and distributed chemicals for a variety of industries, including metalworking, construction, cosmetics, and embalming. The New Lenox Fire Protection District and Will County Emergency Management Agency (Will County EMA) responded to the fire. At 22:48 Central Daylight Time (CDT) on August 3, 2019, Will County EMA notified the Illinois Emergency Management Agency (IEMA) of the fire via Hazardous Materials Incident Report, incident number H-2019-080. At 10:47 CDT on August 5, 2019, MPG Industries notified IEMA of the release of site materials to surrounding drainage areas via Hazardous Materials Incident Report, incident number H-2019-0805. MPG Industries contracted SET Environmental to conduct site containment and remediation activities. At 14:27 CDT on August 5, 2019, EPA was formally notified of the fire and release via National Response Center report number 125477. State and local authorities requested EPA assistance with site assessment, stabilization, and cleanup after SET Environmental stopped work and demobilized prior to the completion of site cleanup.

On August 7, 2019, EPA On-Scene Coordinator (OSC) Jacob Hassan and START contractors conducted a preliminary site walk. The structure on the eastern portion of the site was destroyed in the fire and the remnants consisted of 55-gallon drums and aboveground storage tanks (AST) covered in debris. The

structure on the western portion of the site was partially damaged; the damaged section contained dry chemicals and the undamaged section was a drum storage area. Fire suppression water that included fire-fighting foam and site-related materials impacted drainage ditches along the eastern (Affected Property #1), southern (Affected Property #2), and northern (Affected Property #3) boundaries of the site, before traveling under I-80 via a culvert to impact the agricultural field north of I-80 (Affected Property #4). The 1.2 acre impacted area of Affected Property #4 was approximately 300 feet away from residential homes (See Attachment 1 for a delineation of impacted area).

2.0 EMERGENCY RESPONSE

This section discusses emergency response actions conducted at the site from August 7 to September 11, 2019. Environmental Restoration Inc., LLC served as EPA's Emergency and Rapid Response Services (ERRS) contractor. START collected water, soil, and air samples; conducted air monitoring during limited removal activities; oversaw work conducted by the ERRS contractor; and collected photographic (Appendix C) and written (Appendix D) documentation of site conditions and activities.

2.1 SAMPLING

During emergency response actives, START collected 14 soil samples, six water samples, and two air samples to evaluate the extent of the release.

2.1.1 Soil Sampling

On August 8, 2019, START collected seven soil samples. Five soil samples were collected from the site and two soil samples were collected from the drainage ditch between I-80 and the property directly east of the site (Appendix A, Figure 3). On August 9, 2019, START collected seven soil samples from the impacted agricultural field directly north of I-80 (Appendix A, Figure 3). All soil samples were discrete grab samples that consisted of soils impacted by site materials or soils in the agricultural field that exhibited crop death.

All soil samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), and the Target Analyte List (TAL) metals by Eurofins TestAmerica laboratory, located at 217 Bond Street, University Park, Illinois (Appendix B, Table 1). Soil sample analytical results were compared to EPA Removal Management Levels (RML) for residential soil (cancer risk = 10^{-4}, target hazard quotient = 1.0) and RMLs for industrial soil (cancer risk = 10^{-4}, target hazard quotient = 1.0). RML target hazard quotients equal to 1.0 were used to evaluate analytical results to identify potential contaminants of concern. Sample result exceedances are listed below; approximate concentrations are indicated by (*).

<u>August 8, 2019 Soil Sample Exceedances</u>

- JCF-SOIL-01-20190808
    - Thallium = 0.98 milligrams per kilogram (mg/kg)* (exceeds RML for residential soil of 0.78 mg/kg)
- JCF-SOIL-04-20190808
    - Thallium = 2.5 mg/kg (exceeds RML for residential soil of 0.78 mg/kg)
- JCF-SOIL-07-20190808

- Thallium = 1.4 mg/kg (exceeds RML for residential soil of 0.78 mg/kg)

- JCF-SOIL-08-20190808
  - Thallium = 2.3 mg/kg (exceeds RML for residential soil of 0.78 mg/kg)
- JCF-SOIL-08-20190808-D
  - Thallium = 2.3 mg/kg (exceeds RML for residential soil of 0.78 mg/kg)

August 9, 2019 Soil Sample Exceedances

- JCF-SOIL-10-20190809
  - Thallium = 0.91 mg/kg* (exceeds RML for residential soil of 0.78 mg/kg)
- JCF-SOIL-10C-20190809
  - Thallium = 0.93 mg/kg* (exceeds RML for residential soil of 0.78 mg/kg)

2.1.2 Water Sampling

On August 8, 2019, START collected two water samples from the site, and two water samples from the drainage ditch between I-80 and the property directly east of the site (Appendix A, Figure 3). On August 9, 2019, START collected two water samples from the drainage ditch in the impacted agricultural field directly north of I-80 (Appendix A, Figure 3). All water samples were discrete grab samples from impacted runoff areas that contained firefighting runoff and site-related materials.

All water samples were analyzed for VOCs, SVOCs, and the TAL metals by Eurofins TestAmerica laboratory located at 217 Bond Street, University Park, Illinois (Appendix B, Table 2). Water sample analytical results were compared to EPA Tapwater RMLs (cancer risk = 10^{-4}, target hazard quotient = 3.0) and EPA Maximum Contaminant Levels (MCL) as defined by the National Primary Drinking Water Regulations. Tapwater RMLs and MCLs were used to evaluate analytical results due to the proximity of residential properties with private wells relative to the site. Water sample "JCF-WATER-07-20190808" was analyzed as a waste matrix by the laboratory due to the highly viscous nature of the sample; therefore, "JCF-WATER-07-20190808" was compared to residential and industrial soil RMLs previously stated. RML target hazard quotients equal to 1.0 were used to evaluate analytical results in order to identify potential contaminants of concern. Sample result exceedances are listed below; approximate concentrations are indicated by (*).

August 8, 2019 Water Sample Exceedances

- JCF-WATER-04-20190808
  - Antimony = 0.13 milligrams per Liter (mg/L)* (exceeds tapwater RML of 0.023 and MCL of 0.006 mg/L)

    - Arsenic = 0.051 mg/L* (exceeds tapwater RML of 0.0052 and MCL of 0.01 mg/L)
    - Cadmium = 0.022 mg/L (exceeds MCL of 0.005 mg/L)
    - Cobalt = 0.26 mg/L (exceeds tapwater RML of 0.018 mg/L)
    - Lead = 0.25 mg/L (exceeds tapwater RML and MCL of 0.015 mg/L)
    - Manganese = 6.3 mg/L (exceeds tapwater RML of 1.3 mg/L)
    - Selenium = 0.17 mg/L* (exceeds MCL of 0.05 mg/L)
    - Benzene = 0.031 mg/L* (exceeds MCL of 0.005 mg/L)
    - Tetrachloroethene = 0.029 mg/L* (exceeds MCL of 0.005 mg/L)
- JCF-WATER-08-20190808
    - Cadmium = 0.0051 mg/L* (exceeds MCL of 0.005 mg/L)
    - Benzene = 0.0065 mg/L (exceeds MCL of 0.005 mg/L)
    - Bis(2-ethylhexyl) phthalate = 1.1 mg/L* (exceeds tapwater RML of 0.56 mg/L and MCL of 0.006 mg/L)
    - Naphthalene = 0.27 mg/L (exceeds tapwater RML of 0.017 mg/L)
- JCF-WATER-08-20190808-D
    - Benzene = 0.0069 mg/L (exceeds MCL of 0.005 mg/L)

August 9, 2019 Water Sample Exceedances

- JCF-WATER-09-20190809
    - Arsenic = 0.0088 mg/L* (exceeds tapwater RML of 0.0052)
    - Bis(2-ethylhexyl) phthalate = 0.016 mg/L* (exceeds MCL of 0.006 mg/L)
- JCF-WATER-09-20190809-D
    - Bis(2-ethylhexyl) phthalate = 0.018 mg/L* (exceeds MCL of 0.006 mg/L)

2.1.3 Air Sampling

On August 13, 2019, START collected two air samples, with each sample consisting of a formaldehyde and amines tube. Air sample "JCF-AIR-PR-20190813" was collected from the southern section of the remaining structure that contained intact 55-gallon drums, and air sample "JCF-AIR-FR-20190813" was collected from the northern section of the partially-damaged structure that contained fire-impacted dry materials that contained formaldehyde. Both air samples were collected using sample tubes connected to Casella Apex2 Pro Sampling Pumps. Air sampling pumps for the formaldehyde tubes were set to a flow rate of 1.25 liters per minute (L/min) and were run for approximately 1410 minutes. Air sampling pumps for the amines tubes were set to a flow rate of 1.10 L/min and were run for approximately 1340 minutes.

The two air samples were analyzed for formaldehyde via EPA Method TO-11A and amines via ALS Laboratory Method 101 by ALS laboratory located at 2655 Park Center Drive, Suite A, Simi Valley, California 93065 (Appendix B, Table 3). Air sample analytical results were compared to EPA residential air RSLs (cancer risk 10^{-6}, target hazard quotient = 1.0) and composite worker air RSLs (cancer risk 10^{-6}, target hazard quotient = 0.1). The samples residential RSL and composite worker RSL exceedances are listed below.

- JCF-AIR-FR-20190813
    - Formaldehyde = 950 micrograms per cubic meter (µg/m^3) (exceeds residential air RSL of 0.22 µg/m^3 and composite worker air RSL of 0.94 µg/m^3)
- JCF-AIR-PR-20190813
    - Formaldehyde = 70 µg/m^3 (exceeds residential air RSL of 0.22 µg/m^3 and composite worker air RSL of 0.94 µg/m^3)

2.2 LIMITED REMOVAL OVERSIGHT AND AIR MONITORING

This section details emergency response removal actions that were limited to the partially damaged western structure on site, and the associated air monitoring activities. The limited removal targeted the fire-impacted, dry materials that contained formaldehyde in the northern section of the building, and the non-impacted 55-gallon drums of products stored in the southern section of the building.

2.2.1 Formaldehyde Removal

From August 26 to 28, 2019, START and EPA oversaw the ERRS contractor's removal of burned formaldehyde product from the northern room of the remaining structure. Before the start of work, START conducted air monitoring for formaldehyde with a Formaldemeter htV (Formaldemeter) in the two rooms of the structure. The air monitoring revealed a formaldehyde concentration in the southern product room of 0.02 parts per million (ppm). The formaldehyde concentration detected during monitoring in the northern room containing burned formaldehyde product was 0.1 ppm, equal to the American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit value (TLV) of 0.1 ppm. The exclusion zone (EZ) was established as the northern room, within which all work was conducted in level C personal protective equipment (PPE).

ERRS removed burned product from the northern room into roll off boxes with a skidsteer and shovels. During product removal, RAE Systems AreaRAE Steel units were set up inside and at the perimeter of the work area to monitor volatile organic compounds (VOC), hydrogen sulfide (H2S), carbon monoxide

(CO), oxygen (O2), and lower explosive limit (LEL). A handheld TSI DustTrak DRX unit was set up in the product room to monitor any migration of particulates from the adjacent work area.

START conducted routine air monitoring of formaldehyde concentrations in the northern room, in the product room, at the building perimeter, and at site perimeter. The EZ was extended to include the product room after formaldehyde levels reached above 0.1 ppm in the product room. Formaldehyde concentrations reached as high as 5.11 ppm in the northern room. All formaldehyde concentrations recorded outside the exclusion zone and at site perimeters were below 0.1 ppm.

During removal work, a leaking fiber drum was discovered in the southwest corner of the product room. VOC concentrations at the drum reached 4 ppm, and formaldehyde concentrations were measured as high as 3.78 ppm. The drum was removed and oil dry was spread on the leaked product before being containerized for disposal. Approximately 40 tons of fire-impacted waste was removed from the remaining structure. After ERRS completed all removal work in the remaining structure, the formaldehyde concentration was 0.07 ppm in the product room and 0.34 ppm in the northern room, both below the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) of 0.75 ppm.

2.2.2 PRP Product Removal

From August 29 to September 11, 2019, the facility owner and staff moved chemical products and equipment not impacted by the fire off site. EPA and START conducted air monitoring for VOCs and formaldehyde with a RAE Systems MultiRAE Pro and Formaldemeter, respectively. Air monitoring detected no VOC exceedances of background concentrations or formaldehyde concentrations above the OSHA PEL of 0.75 ppm during product removal by the facility owner.

2.2.3 Site Transition to Removal

The emergency response phase of this site ended on September 11, 2019, at which point EPA and START demobilized. Following the emergency response phase, the PRP established 24-hour site security on site and ERRS provided stormwater containment support. On October 9, 2019, the project transitioned to a PRP-led, time-critical removal under oversight by EPA pursuant to an Administrative Settlement Agreement and Order on Consent (ASAOC) (#VW20C001). Wastes staged on site following the emergency response phase, including solid and liquid waste and stored chemicals, were to be transported off site and disposed of by site contractors in the removal phase of the project.

3.0 PRP-LED REMOVAL

This section discusses PRP removal activities conducted at the Joliet Chemical Fire site from October 9 to December 20, 2019. The PRP contracted Schrack Environmental Consulting, Inc. (SECI) as environmental consultants to manage the cleanup. START conducted oversight and documentation of PRP-led removal activities, conducted air monitoring during PRP-led removal activities, and collected soil and residential potable water samples. START documented site conditions and activities via photographs (Appendix C) and field logbook notes (Appendix D). The PRP contractor responsible for waste removal and disposal changed during the removal. Wortman was the initial contractor responsible for waste removal and disposal; on November 4, 2019, R.W. Collins replaced Wortman as the contractor responsible for waste removal and disposal.

3.1 REMOVAL ACTIVITY TIMELINE

The following timeline outlines removal activities that occurred each week. Appendix E provides a summary of wastes removed from the site and lists the corresponding disposal facilities.

Dates	Removal Activities
10/09/19 – 10/11/19	• No site activities occurred; work was restricted to project planning.
10/14/19 – 10/18/19	• EPA, START, ERRS, and PRP contractors SECI and Wortman mobilized to the site and established work zones and an on-site project office. • Wortman mobilized excavator to the site and dispersed sand over the impacted areas. • SECI established a decontamination area. • ERRS cleaned the three frac tanks on site (mobilized during ER); one frac tank was demobilized. • Three 25-yard roll-off containers of formaldehyde waste (generated during ER) were transported off site for disposal at Envirosafe Services of Ohio, Inc. • Turn-Key Environmental removed 1,900 gallons of non-hazardous oil and four tanker truckloads of non-hazardous water for disposal at Water Integrated Treatment System LLC.
10/21/19 – 10/25/19	• Wortman removed eight truckloads of scrap metal from the site. • Wortman applied sand to solidify oil material within the containment berm. • Turn-Key Environmental removed 1,700 gallons of non-hazardous sludge and four tanker truckloads of non-hazardous water for disposal at Water Integrated Treatment System LLC. • ERRS cleaned a frac tank and demobilized the remaining two frac tanks from the site.

Dates	Removal Activities
	• One 25-yard roll-off container of formaldehyde waste (generated during ER) was transported off site for disposal at Envirosafe Services of Ohio, Inc. • SECI contracted EnviroServe to sample fire-impacted drums from the destroyed structure. • START collected confirmation soil samples from the impacted right-of-way near the site's entry (Affected Property #2) following past soil removal by ERRS (see section 3.3.2 for details).
10/28/19 – 11/01/19	• Wortman removed 13 truckloads of scrap metal from the site. • Wortman applied sand and mulch to solidify oil material within the containment berm. • SECI deployed one frac tank to the site. • Turn-Key Environmental removed five tanker truckloads of non-hazardous water for disposal at Water Integrated Treatment System LLC. • EnviroServe continued drum characterization.
11/04/19 - 11/08/19	• R.W. Collins replaced Wortman as the general contractor. • R.W. Collins solidified approximately 150 fire-impacted, 55-gallon drums using an excavator and mulch. • R.W. Collins removed one truckload of scrap metal from the site. • Turn-Key Environmental removed two tanker truckloads of non-hazardous water for disposal at Water Integrated Treatment System LLC. • Turn-Key Environmental removed nine non-impacted chlorinated oil drums that were stored in the intact structure. • North Branch Environmental removed 660 gallons of non-hazardous sludge from 13 non-impacted drums stored in the intact structure. • START and EPA delineated the area of crops surrounding the impacted area of the agricultural field that were not harvested. • START collected assessment soil samples from the I-80 right-of-way (Affected Property #3; see section 3.3.1 for details). • MPG Industries repurposed 31 55-gallon drums of non-impacted detergent products to Whyte Gate Inc.
11/11/19 - 11/15/19	• R.W. Collins removed 38 truckloads of non-hazardous contaminated soil and solids for disposal at Laraway landfill. • R.W. Collins removed two truckloads of scrap metal from the site. • R.W. Collins excavated the drainage area north of the concrete pad to a depth of 6 to 12 inches below ground surface (bgs). • North Branch Environmental removed two tanker truckloads of non-hazardous water for disposal at Water Integrated Treatment System LLC. • START collected an additional assessment soil sample from the I-80 right-of-way (Affected Property #3; see section 3.3.1 for details).
11/18/19 - 11/22/19	• Site security demobilized. • R.W. Collins removed 16 truckloads of non-hazardous contaminated soil and solids for disposal at Laraway landfill.

Dates	Removal Activities
	• R.W. Collins excavated drainage area east of concrete pad on site, and the drainage ditch between I-80 and the property directly east of the site to a depth of 6 to 12 inches bgs. • START collected two confirmation soil samples from the excavated ditch between I-80 and the property directly east of the site (Affected Property #1; see section 3.3.2 for details). • North Branch Environmental removed one tanker truckload of non-hazardous water for disposal at Water Integrated Treatment System LLC. • SECI removed potentially contaminated insulation from the northern section of the remaining structure. • R.W. Collins brought 14 truckloads of stone and 11 truckloads of gravel to fill the drainage areas and parking lot. • START and EPA visited potential residential and commercial potable water sampling properties.
11/25/19 - 11/29/19	• Limited site work was performed because of the Thanksgiving holiday. • Ability Septic flushed the underground tanks on site, resulting in removal of one tanker truckload of non-hazardous water for disposal at Water Integrated Treatment System LLC.
12/02/19 - 12/06/19	• START, EPA, and SECI conducted potable well water sampling (see section 3.3.3 for details). • GeoServe Drillers arrived on site to collect soil borings for SECI sampling. • START collected confirmation soil samples from the site.
12/09/19 - 12/13/19	• START and EPA marked excavation area for impacted agricultural field. • Agricultural field excavation was delayed because of weather.
12/16/19 - 12/20/19	• START and EPA delivered potable water sampling result letters. • R.W. Collins excavated the impacted soil from the agricultural field. • START and SECI collected confirmation soil samples from the agricultural field (Affected Property #4, see section 3.3.2 for details). • START collected assessment soil samples from a residential yard near the agricultural field (see section 3.3.1 for details). • R.W. Collins removed 12 truckloads of non-hazardous contaminated soil and solids for disposal at Laraway Landfill. • 31 drums of non-impacted chemicals (approximately 11,460 pounds) were shipped to Whyte Gate Inc. for reuse.

Notes:
bgs = Below ground surface
EPA = U.S. Environmental Protection Agency
ERRS = Emergency and Rapid and Response Services
SECI = Schrack Environmental Consulting, Inc.
START = Superfund Technical Assessment and Response Team

3.2 AIR MONITORING

During site activities, START conducted air monitoring to (1) evaluate potential risks to human health and the environment posed by VOCs and particulates generated during removal activities; (2) evaluate the effectiveness of the engineering and safety controls in preventing the off-site migration of particulates; and (3) initiate corrective actions, as appropriate, during the removal activities at the site. Air monitoring activities were conducted in accordance with the site-specific Air Monitoring Plan (Tetra Tech 2019a). START conducted periodical, roaming air monitoring for VOCs and particulates in the exclusion zone and along the site perimeter when weather conditions and site operations permitted. START monitored VOC concentrations with a RAE Systems, Inc. MultiRAE Pro (MultiRAE Pro), and particulates were monitored with a handheld TSI DustTrak DRX Aerosol Monitor Model 8534. Particulate air monitoring resulted in nine days with action level (2.5 milligrams per cubic meter for particulate matter with an aerodynamic diameter up to 100 microns) exceedances, all exceedance durations were two minutes or less except for a single 18-minute duration exceedance. VOC air monitoring resulted in three days with action level (1 ppm) exceedances, including two short exceedances (two readings each) and one sustained low-level exceedance (average = 1.2 ppm, duration = 200 minutes). Air monitoring exceedances were noted in the field logbook along with the likely source of the exceedance. The air monitoring data collected in the field were downloaded daily from monitoring instruments and summarized (summary table for VOCs and other MultiRAE Pro parameters can be found in Appendix B, Table 4; summary table for particulates can be found in Appendix B, Table 5).

3.3 SAMPLING

START conducted soil sampling to assess the level of impact to certain locations (assessment sampling), and to confirm the effectiveness of soil removal actions (confirmation sampling). START conducted potable well water sampling for home and business owners in the area to evaluate potential impacts to well water. Potable well water sampling was conducted pursuant to a workplan approved by Will County Department of Public Health (WCDPH), which included the collection of split samples by START and SECI.

3.3.1 Assessment Soil Sampling

<u>Affected Property # 3</u>

On November 8, 2019, START collected five composite soil samples from the I-80 right-of-way (Affected Property #3). On November 15, 2019, START collected an additional composite soil sample

from Affected Property #3 (map displaying sampling locations can be found in Appendix A, Figure 4; analytical results summary table can be found in Appendix B, Table 6). Sampling activities were conducted in accordance with a work plan approved by the Illinois Department of Transportation. Composite soil samples consisted of five aliquots each consisting of the soil from 0 to 3 inches below ground surface (bgs). Aliquots were then combined in plastic bags and thoroughly homogenized before being placed in sample containers provided by the laboratory. The composite soil samples were analyzed for diesel-range organics (DRO) by ALS laboratory, located at 3352 128th Avenue in Holland, Michigan. Soil sample analytical results were compared to Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) levels for DRO. The six composite soil samples from Affected Property #3 did not exceed IEPA TACO levels for DRO; therefore, no soil removal actions were required for this property.

Residential Property Near Affected Property #4

On December 17, 2019, START collected two discrete soil samples from the yard of a residential property proximate to the impacted agricultural field (Affected Property #4) under direction of OSC Ruesch following property owner concerns (Appendix B, Table 7). The two discrete soil samples each consisted of soil collected from 0 to 3 inches bgs. The soil samples were analyzed for DRO and the TAL metals by Shealy Environmental Services, Inc., laboratory located at 106 Vantage Point Drive in West Columbia, South Carolina. Soil sample analytical results were compared to IEPA TACO levels for DRO and EPA Residential Soil RMLs (cancer risk 10^{-4}, target hazard quotient = 3.0) for metals. The two discrete soil samples from the residential yard proximate to the agricultural field did not exceed IEPA TACO levels for DRO or any EPA Residential Soil RMLs for metals; therefore, no soil removal actions were required for this property.

3.3.2 Confirmation Soil Sampling

Affected Property # 1

On November 18, 2019, START collected two discrete confirmation soil samples from the drainage ditch between the I-80 right-of-way and the property directly east of the site (Affected Property #1) following soil removal conducted by R.W. Collins (map displaying sampling locations can be found in Appendix A, Figure 5; analytical results summary table can be found in Appendix B, Table 8). The two discrete soil samples each consisted of soil collected from 0 to 3 inches bgs. Sample "MPGI-PP-Soil-01-111819" was collected from the west bank of the ditch, and sample "MPGI-PP-Soil-02-111819" was collected from the

east bank of the ditch. The soil samples were analyzed for DRO by ALS laboratory located at 3352 128th Avenue in Holland, Michigan. Soil sample analytical results were compared to IEPA TACO levels for DRO. The two confirmation soil samples from the Affected Property #1 drainage ditch did not exceed IEPA TACO levels for DRO; therefore, no additional soil removal actions were required for this property prior to restoration.

Affected Property # 2

On October 22, 2019, START collected four discrete confirmation soil samples from the site entry right-of-way (Affected Property #2) following soil removal conducted by ERRS during the emergency response phase of this site. A map displaying sampling locations can be found in Appendix A, Figure 6; analytical results summary table can be found in Appendix B, Table 9. The four discrete soil samples each consisted of soil collected from 0 to 3 inches bgs. The soil samples were analyzed for DRO by ALS laboratory located at 3352 128th Avenue in Holland, Michigan. Soil sample analytical results were compared to IEPA TACO levels for DRO. The four confirmation soil samples from Affected Property #2 did not exceed IEPA TACO levels for DRO; therefore, no additional soil removal actions were required for this property prior to restoration.

Site

On December 4, 2019, START collected nine discrete confirmation soil samples from the drainage areas directly north and east of the concrete pad on site following soil removal conducted by R.W. Collins (map displaying sampling locations can be found in Appendix A, Figure 7; analytical results summary table can be found in Appendix B, Table 10). The nine discrete soil samples each consisted of soil collected from 0 to 3 inches bgs; samples were co-located with SECI confirmation soil boring locations. The soil samples were analyzed for DRO by Shealy Environmental Services, Inc. laboratory located at 106 Vantage Point Drive in West Columbia, South Carolina. Soil sample analytical results were compared to IEPA TACO levels for DRO. The nine confirmation soil samples from the site drainage areas did not exceed IEPA TACO levels for DRO; therefore, no additional soil removal actions were required for this property.

Affected Property # 4

From December 17, 2019 to December 19, 2019, START collected 14 discrete confirmation soil samples from the drainage ditch in the agricultural field (Affected Property #4) following soil removal conducted by R.W. Collins (map displaying sampling locations can be found in Appendix A, Figure 8; analytical results summary table can be found in Appendix B, Table 11). The 14 discrete soil samples each

consisted of soil collected from 0 to 3 inches bgs. The sampling event consisted of five main areas, in each area except the area closest to I-80, a sample was collected from the center, and each bank of the drainage ditch. The soil samples were analyzed for DRO and TAL metals by Shealy Environmental Services, Inc. laboratory located at 106 Vantage Point Drive in West Columbia, South Carolina. Soil sample analytical results were compared to IEPA TACO levels for DRO and EPA Residential Soil RMLs (cancer risk 10^{-4}, target hazard quotient = 3.0) for metals. The 14 confirmation soil samples from Affected Property #4 did not exceed IEPA TACO levels for DRO or any EPA Residential Soil RMLs for metals; therefore, no further soil removal actions were required for this property prior to backfilling and re-grading.

3.3.3 Potable Well Water Sampling

EPA, in consultation with WCDPH, established that potable well water sampling would be offered to property owners within Non-responsive of the agricultural field, in addition to specific properties WCDPH selected. Potable well water sampling included the collection of split samples by START and SECI to ensure reliable analytical results. A work plan was developed by EPA and SECI in coordination with WCDPH and accepted by WCDPH prior to implementation. In total, 25 property owners (not including the site) were offered potable well water sampling via in-person vits and an outreach letter (Attachment 2); of those, five residential and four commercial property owners selected to have their well water sampled.

From December 2 to 3, 2019, START collected 11 potable well water samples from residential and commercial properties near the site (Appendix B, Table 12). EPA accompanied START during potable well water sampling events and SECI collected split samples with START. Samples were collected from outdoor faucets after purging the well until equilibration, as indicated by YSI 556 flow-through cell measurements of specific conductance, pH, dissolved oxygen, and oxidation-reduction potential (ORP), or following 30 minutes of purging. Prior to purging and sampling, START and SECI entered properties to confirm that the proposed sampling faucet waterline surpassed any treatment units. The water samples were analyzed for VOCs and SVOCs by Shealy Environmental Services, Inc. laboratory located at 106 Vantage Point Drive in West Columbia, South Carolina. Potable well water sample analytical results were compared to EPA tapwater RSLs (cancer risk 10^{-6}, target hazard quotient = 0.1), 35 Illinois Administrative Code (IAC) 742 Class I Groundwater Objectives, and MCLs as established by the National Primary Drinking Water Regulations. The 11 potable well water samples did not exceed EPA tapwater RSLs, IAC 742 Class I Groundwater Objectives, or MCLs for VOCs and SVOCs; therefore, no remedial actions were required for the properties assessed.

4.0 REMOVAL SUMMARY

The following is a summary of the emergency response and removal activities completed from August 7 to December 20, 2019:

- A total of 1,146.32 tons of non-hazardous solid waste were shipped off site for disposal, 1,128.1 tons were disposed of at Laraway landfill, and 18.22 tons of formaldehyde-contaminated fire waste were disposed of at Envirosafe Services of Ohio, Inc. A total of 60,945 gallons of non-hazardous water waste and 4,260 gallons of non-hazardous oil/sludge waste were shipped off site for disposal at Water Integrated Treatment System LLC. A total of 95.45 tons of scrap metal were shipped off site for disposal at various locations. 11,460 pounds of chemical products were shipped to Whyte Gate, Inc. for reuse.

- During the emergency response phase, START collected 14 soil samples, six water samples, and two air samples to evaluate site conditions. START conducted air monitoring for VOCs, particulates, and formaldehyde during limited removal actions conducted by ERRS. START additionally documented site conditions and limited removal actions.

- During the emergency response phase, ERRS conducted site stabilization measures and conducted a limited removal of waste. Site stabilization measures included the creation of a containment berm and a stormwater collection area. Limited removal actions included removal of formaldehyde waste in the northern section of the partially-damaged building on site, and removal of non-impacted products from the southern section of the partially-damaged building on site.

- During the PRP-lead removal phase, START collected eight soil samples to evaluate potentially impacted areas and 29 soil samples to confirm the effectiveness of soil removal actions. START conducted oversight of removal actions and conducted air monitoring for VOCs and particulates to ensure contaminates were not migrating off site.

- During the PRP-lead removal phase, EPA and START worked in conjunction with the Will County Department of Public Health to provide potable well water sampling to residential and commercial properties proximate to the site or impacted areas. START and SECI collected potable well water split samples from 10 properties in addition to the well samples collected on site.

5.0 REFERENCES

Tetra Tech, Inc. (Tetra Tech). 2016. Quality Assurance Project Plan. Superfund Technical Assessment and Response Team (START IV), U.S. Environmental Protection Agency (EPA) Region 5. Revision 3. June.

Tetra Tech, Inc. (Tetra Tech). 2019a. "Air Monitoring Plan, Revision 0 – Joliet Chemical Fire PRP Cleanup Site." Prepared for EPA under Contract No. 68-HE-0519-D0005. October 4.

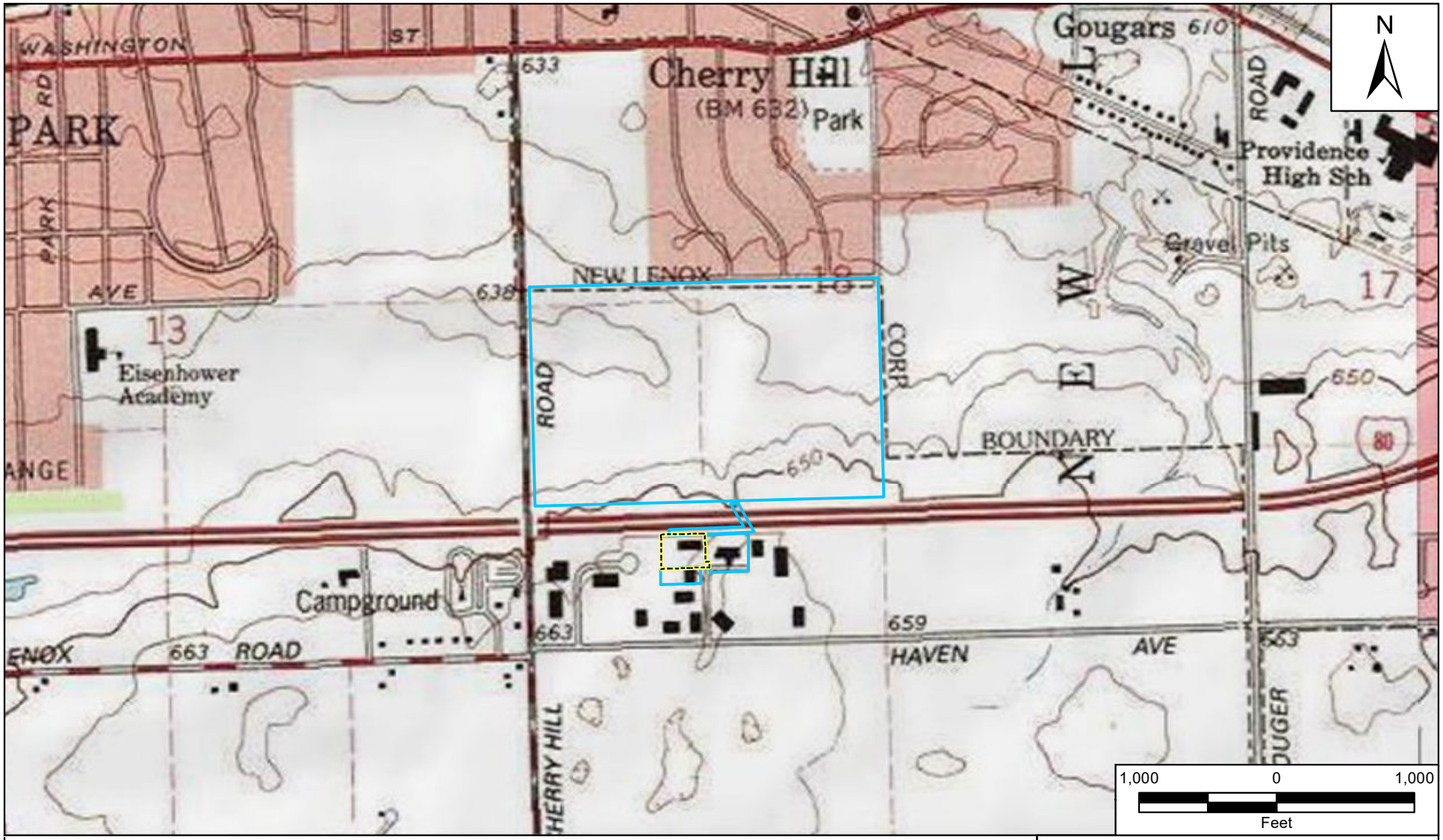
Tetra Tech, Inc. (Tetra Tech). 2019b. "Sampling and Analysis Plan, Revision 0 – Joliet Chemical Fire PRP Cleanup Site." Prepared for EPA under Contract No. 68-HE-0519-D0005. November 26.

Tetra Tech, Inc. (Tetra Tech). 2019c. Quality Assurance Project Plan. Superfund Technical Assessment and Response Team (START V), EPA Region 5. Revision 1. August

APPENDIX A

FIGURES

1 – SITE LOCATION MAP
2 – SITE LAYOUT MAP
3 – EMERGENCY RESPONSE SOIL AND WATER SAMPLE RESULTS
4 – AFFECTED PROPERTY #3 SOIL SAMPLE RESULTS
5 – AFFECTED PROPERTY #1 CONFIRMATION SOIL SAMPLE RESULTS
6 – AFFECTED PROPERTY #2 CONFIRMATION SOIL SAMPLE RESULTS
7 – SITE CONFIRMATION SOIL SAMPLE RESULTS
8 – AFFECTED PROPERTY #4 CONFIRMATION SOIL SAMPLE RESULTS



Legend

- Approximate Site Boundary - MPG Industries
- Affected Property

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
Joliet, Will County, Illinois

Figure 1
Site Location Map

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

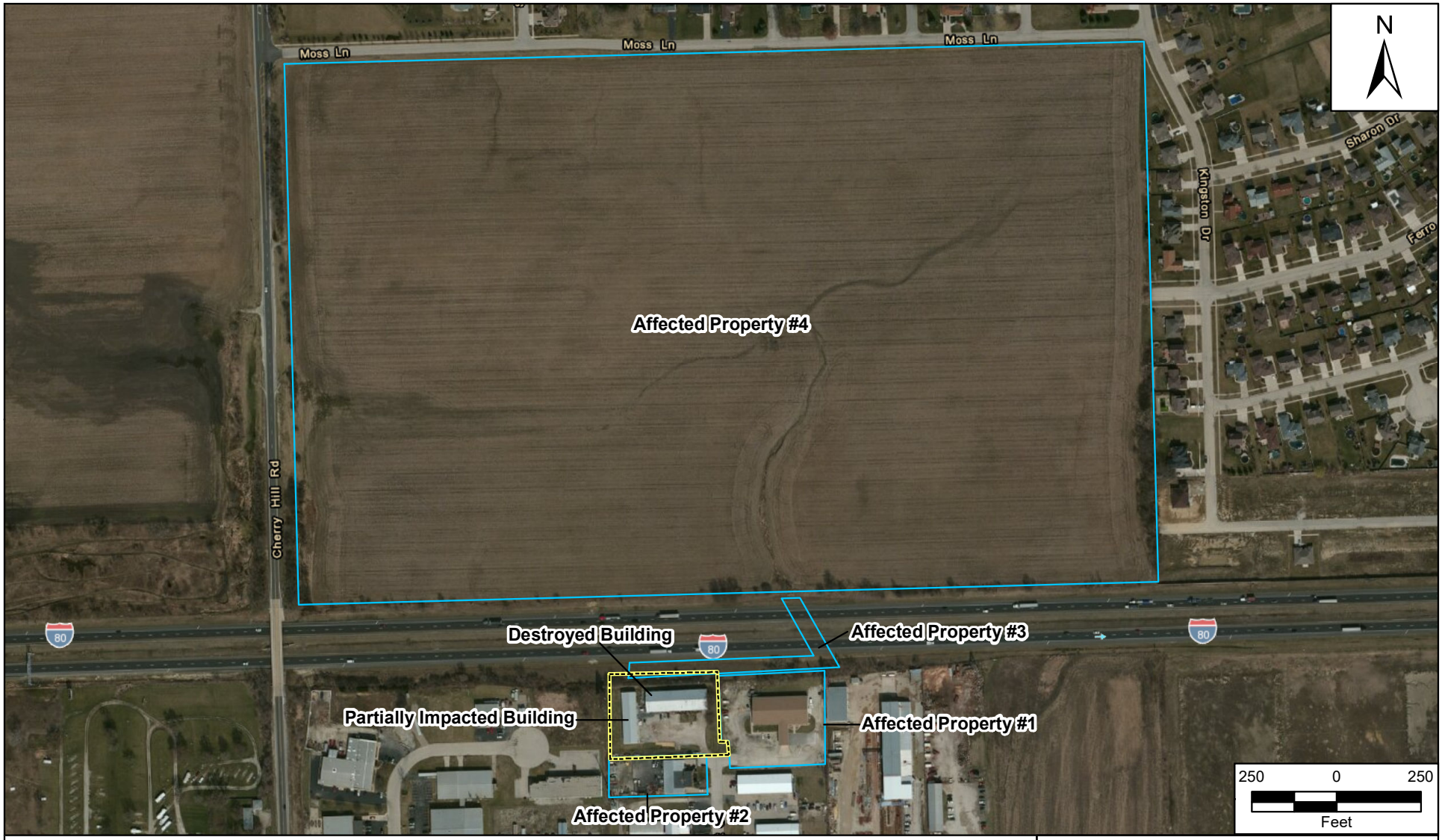
File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\Fig1 - Site Location.mxd

Date Saved: 11/25/2019

EPA Contract No.: 68-HE-0519-D005

TO-TOLIN: 0069-0002AJ001

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
Projection: Transverse Mercator
Datum:North American 1983 Units: Foot US



Legend

- Approximate Site Boundary - MPG Industries
- Affected Property

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
Joliet, Will County, Illinois

Figure 2
Site Layout Map

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\Fig2 - Site Layout.mxd

Date Saved: 2/25/2020

EPA Contract No.: 68-HE-0519-D005

TO-TOLIN: 0069-0002AJ001

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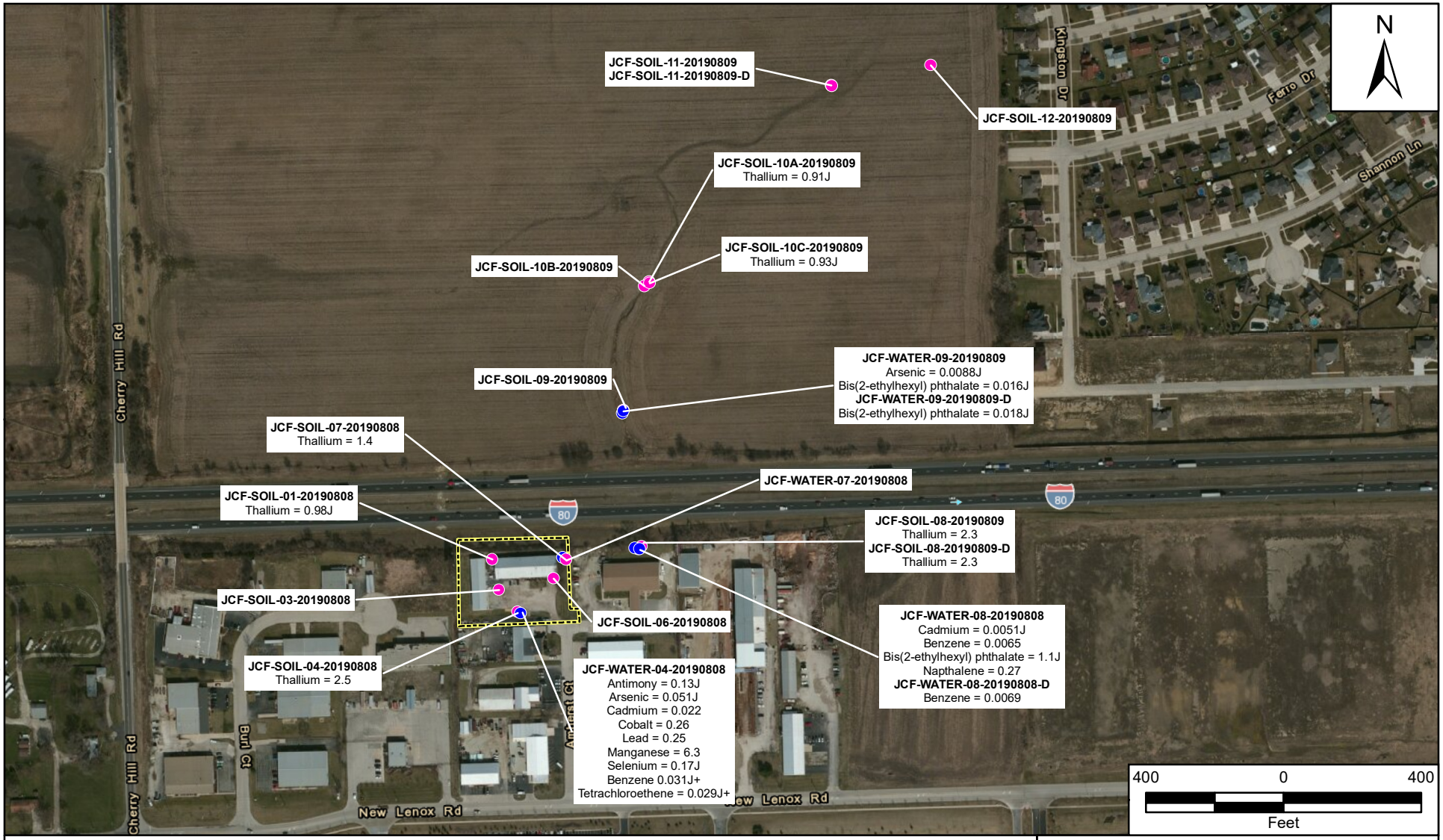


Legend

- Soil Sample Location
- Surface Water Sample Location
- Site Boundary - MPG Industries

Note:
Soil sample results are represented in mg/kg, water sample results are represented in mg/L
Soil and water samples were analyzed for TAL Metals, VOCs, SVOCs
Soil sample results show exceedances for Residential Soil RMLs (Cancer Risk 10-4, THQ = 1)
Water Sample show results that exceeded tapwater RMLs (Cancer Risk 10-4,THQ = 3) and Maximum contaminant levels.

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
TAL = Target analyte list
VOC = Volatile organic compounds
SVOC = Semivolatile organic compounds

Joilet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox, Joliet, Will County, Illinois

Figure 3
Emergency Response Soil and Water Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech, Inc.

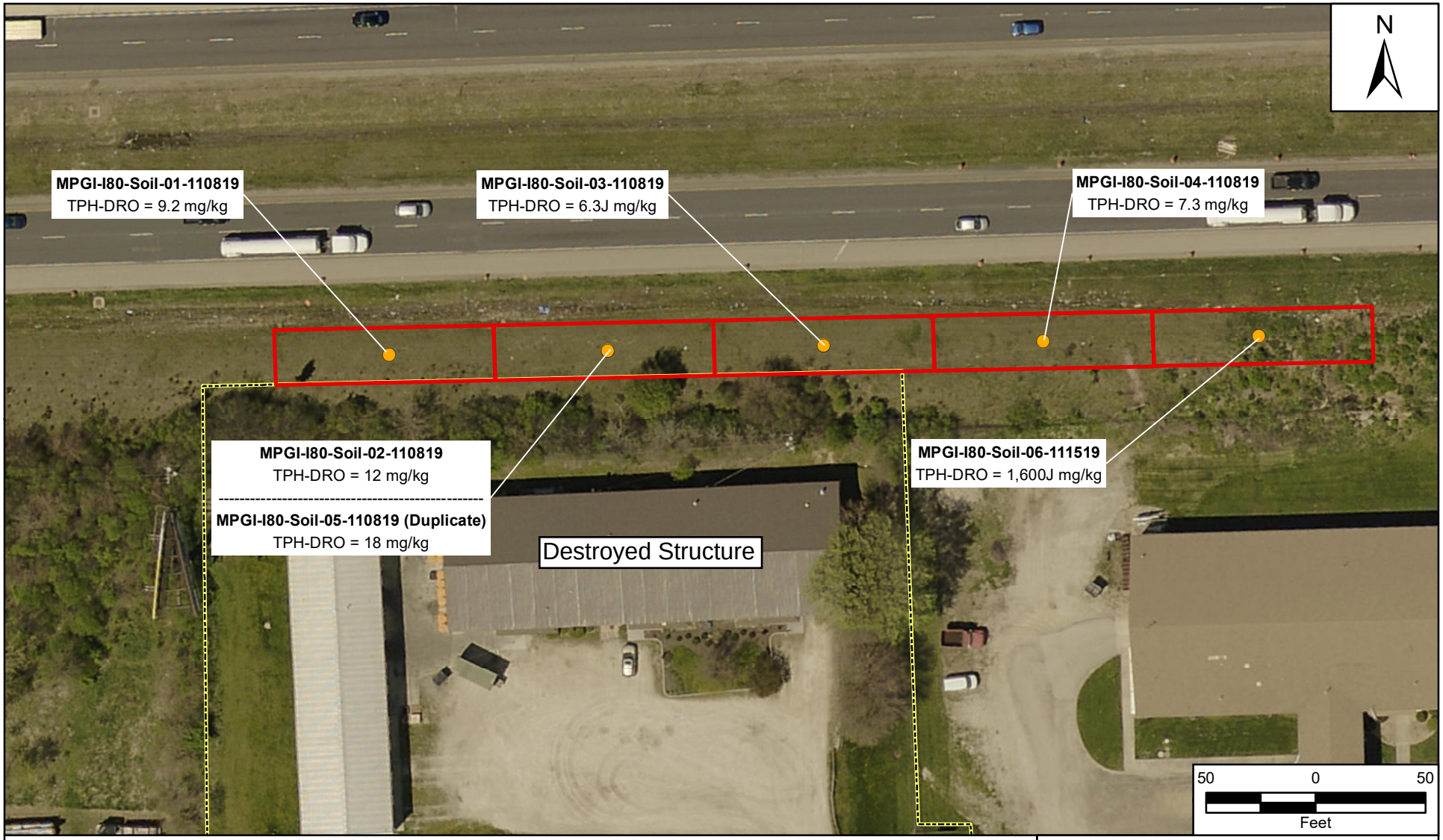
File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\2020-02\Fig3-SampleResults.mxd

Date Saved: 3/25/2020

EPA Contract No.: 68-HE-0519-D0005

TO-TOLIN: 0069-0002AJ001

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
Projection: Transverse Mercator
Datum:North American 1983 Units: Foot US



Legend

- Soil Sampling Location
- Sample Area
- Site Boundary - MPG Industries

J - Analyte is present at an estimated concentration between the MDL and Report Limit
TPH - Total Petroleum Hyrdrocarbons
mg/kg - Milligram per Kilogram

Notes:
Each sample is a composite sample composed of five aliquots.

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox Township, Joliet. Will County, Illinois

Figure 4
Affected Property #3 Soil Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\2020-02\Fig4-SoilSampleResults.mxd

Date Saved: 3/24/2020

EPA Contract No.: 68-HE-0519-D005

TO-TOLIN: 0069-0002AJ001

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
Projection: Transverse Mercator
Datum:North American 1983 Units: Foot US

Legend

- Soil Sample Location

DRO - Diesel Range Organics
TPH - Total Petroleum Hydrocarbons
mg/kg - Milligram per Kilogram
U - Analyzed but not detected above the method detection limit

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox Township, Joliet. Will County, Illinois

Figure 5
Affected Property #1 Confirmation Soil Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

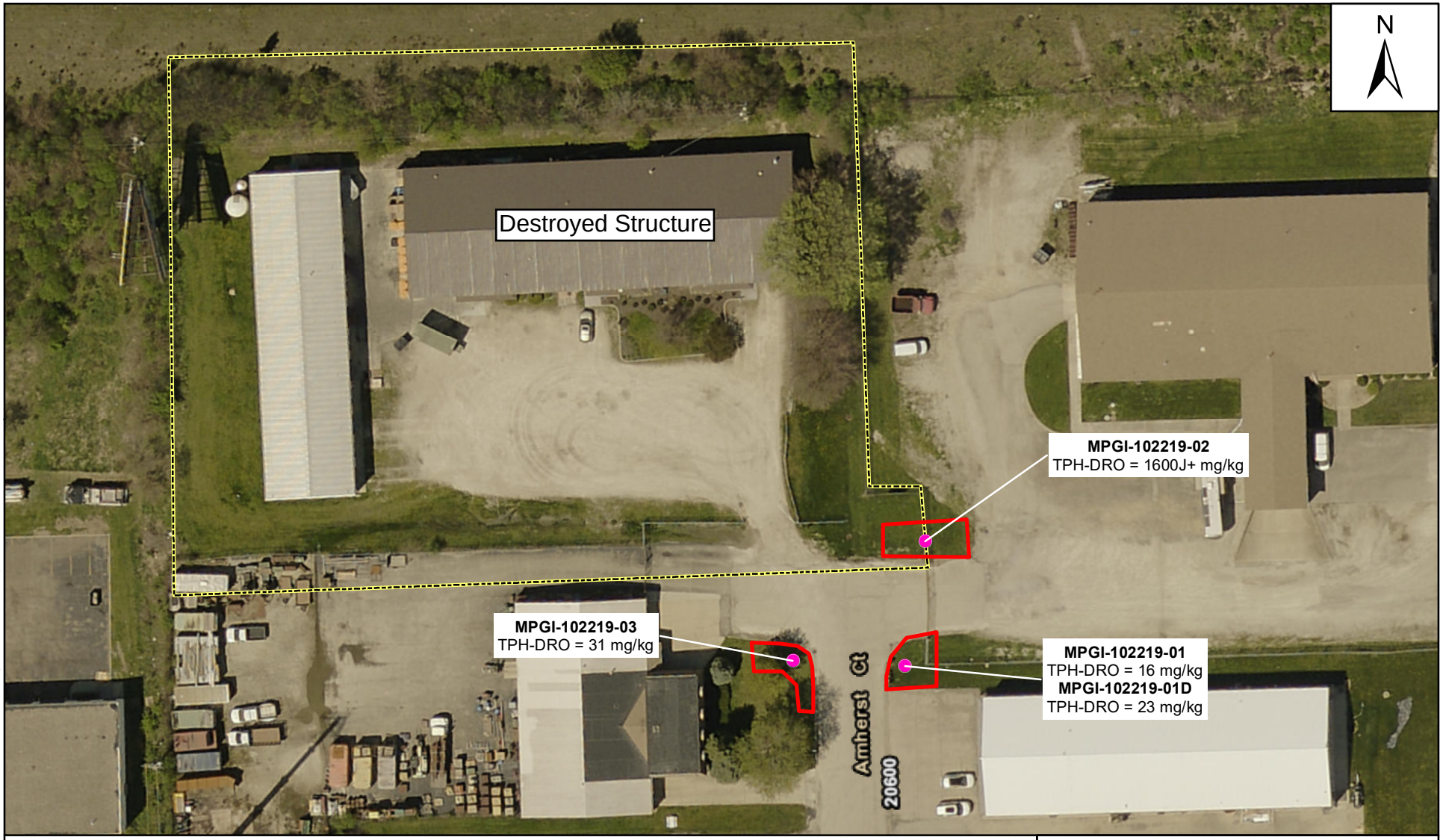
File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\2020-02\Fig5-AffectedProperty1.mxd

Date Saved: 3/24/2020

EPA Contract No.: 68-HE-0519-D005

TO-TOLIN: 0069-0002AJ001

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
Projection: Transverse Mercator
Datum:North American 1983 Units: Foot US



Legend

- Soil Sample Location
- Site Boundary - MPG Industries

J+ - The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
DRO - Diesel Range Organics
TPH - Total Petroleum Hydrocarbons
mg/kg - Milligram per Kilogram

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox Township, Joliet. Will County, Illinois

Figure 6
Affected Property #2 Confirmation Soil Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

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Date Saved: 3/24/2020

EPA Contract No.: EP-S5-13-01

TO-TOLIN: S05-0001-1908-002

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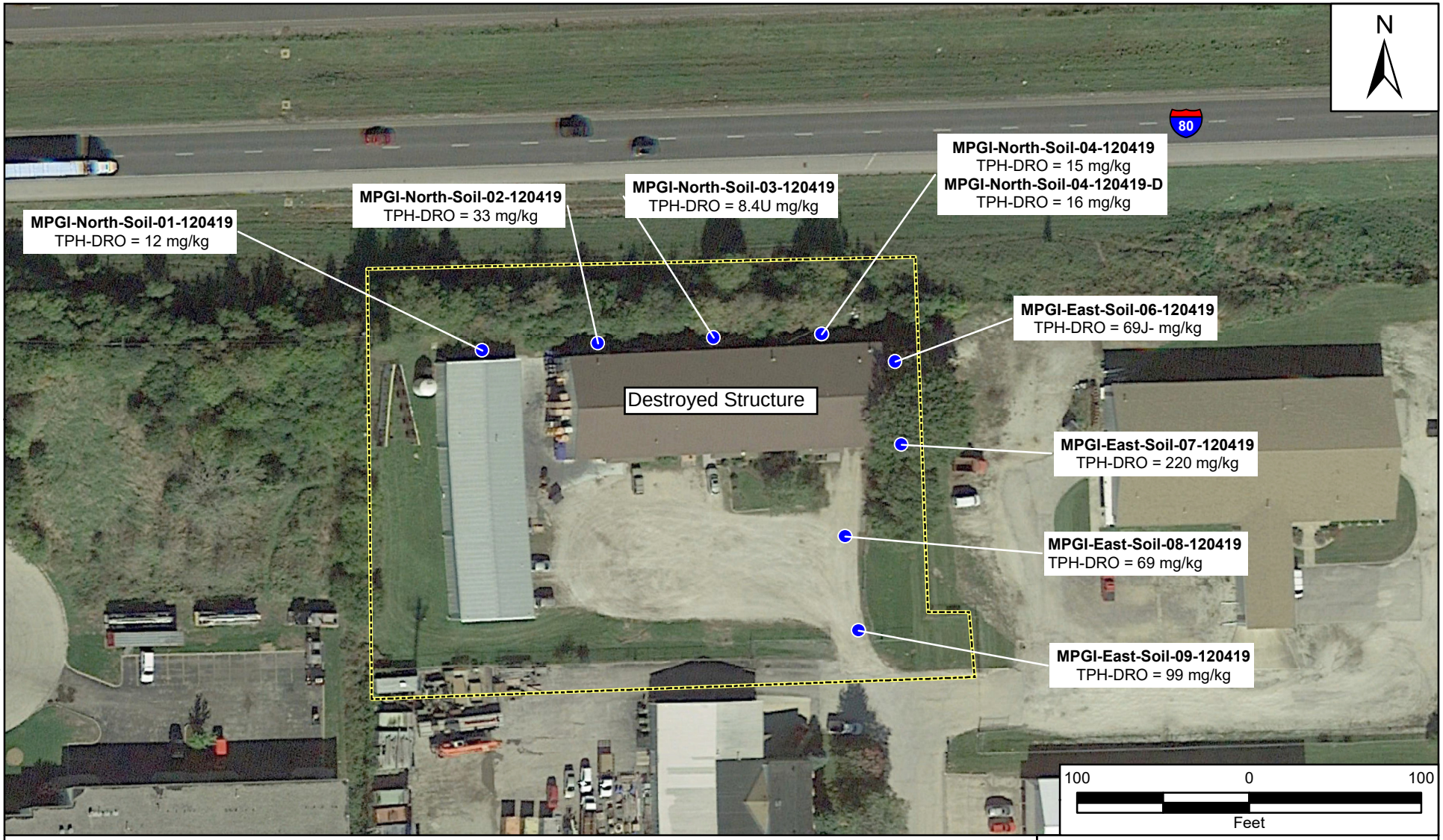

Legend

- Soil Sample Location
- Site Boundary - MPG Industries

J- - The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
U - The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
DRO - Diesel Range Organics
TPH - Total Petroleum Hydrocarbons
mg/kg - milligrams pers kilogram

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox Township, Joliet. Will County, Illinois

Figure 7
Site Confirmation Soil Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech

File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\2020-02\Fig7-ConfirmationSoilSampleResults.mxd

Date Saved: 3/24/2020

EPA Contract No.: 68-HE-0519-D005

TO-TOLIN: 0069-0002AJ001

Coordinate System: NAD 1983 StatePlane Illinois East FIPS 1201 Feet
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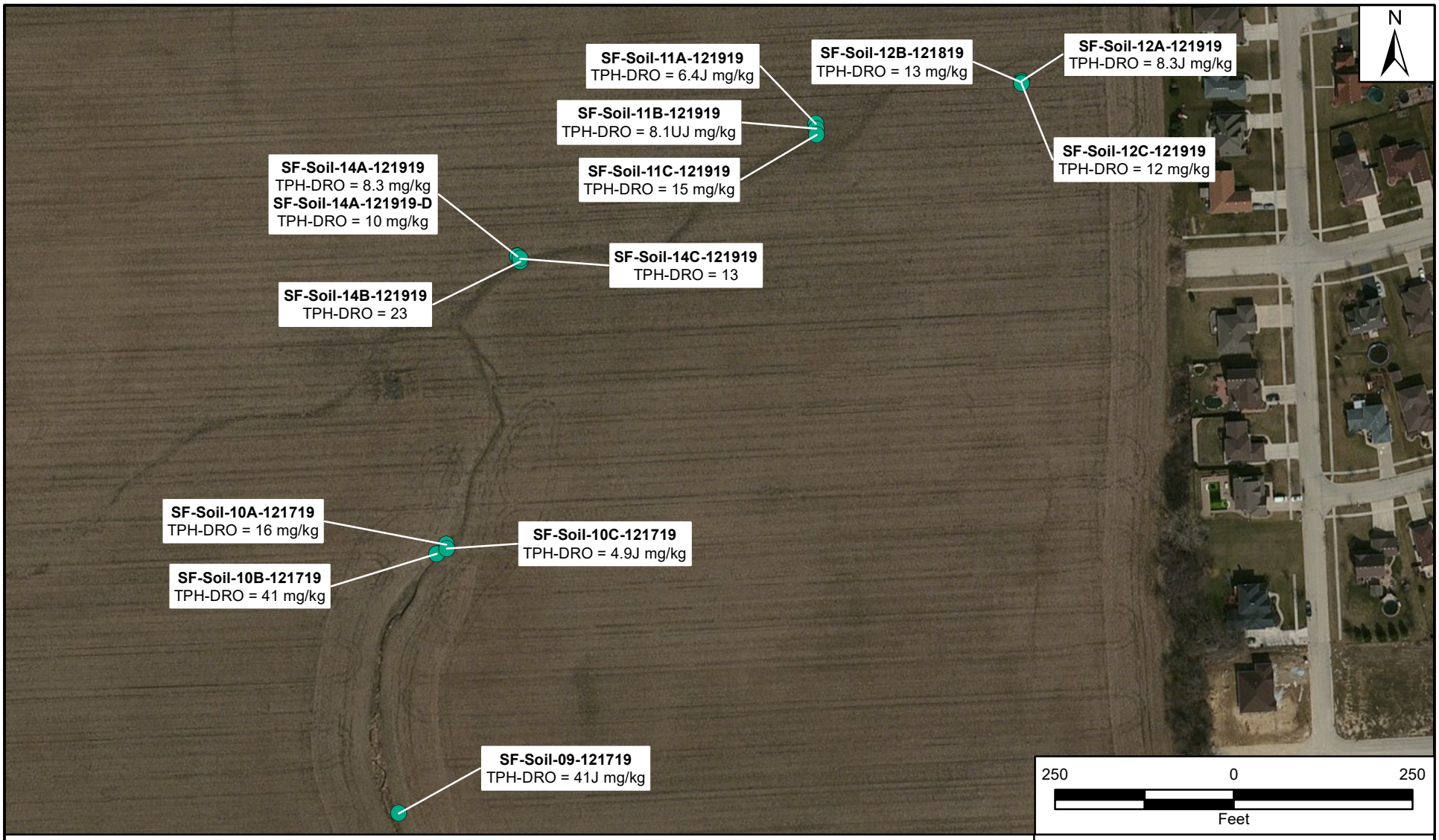
Datum:North American 1983 Units: Foot US



Legend

Soil Sample Location

DRO = Diesel range organics
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
mg/kg = Milligram per kilogram
RML = Regional Removal Management Limit
TAL = Target Analyte Levels
TPH = Total petroleum hydrocarbons
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Note: Each sample was analyzed for TAL Metals, no exceedances based on RML for Residential Soil

Joliet Chemical Fire PRP Cleanup
20604 Amherst Court
New Lenox Township, Joliet. Will County, Illinois

Figure 8

Affected Proeprty #4 Confirmation Soil Sample Results

TETRA TECH

Prepared For: USEPA	Prepared By: Tetra Tech, Inc.

File Path: G:\G\G9031-START V\Illinois\Joliet Chemical Fire\mxd\2020-02\Fig8-AffectedProperty4.mxd

Date Saved: 3/24/2020 EPA Contract No.: 68-HE-0519-D0005 TO-TOLIN: 0069-0002AJ001

Source: Esri Clarity World Imagery, 2019 Coordinate System: NAD 1983 StatePlane Illinois West FIPS 1202 Feet Projection: Transverse Mercator Datum:North American 1983 Units: Foot US

APPENDIX B

SUMMARY TABLES

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-01-20190808	JCF-SOIL-03-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	13000	1300
Antimony	31	470	6.6	0.88 J
Arsenic	35	300	2.3	1.1
Barium	15000	220000	110	15
Beryllium	160	2300	0.63	0.18 J
Cadmium	71	980	0.34 J+	0.26 J+
Calcium	NA	NA	44000	100000
Chromium	NA	NA	18	3.3
Cobalt	23	350	2.8	0.99
Copper	3100	47000	66	10
Iron	55000	820000	10000	3100
Lead	400	800	5.2	7.8
Magnesium	NA	NA	15000	61000
Manganese	1800	26000	500	190
Nickel	1500	22000	14	2.2
Potassium	NA	NA	4300	650
Selenium	390	5800	1.5 U	1 U
Silver	390	5800	0.92	0.48 J
Sodium	NA	NA	2400	2600
Thallium	0.78	12	0.98 J	1 U
Vanadium	390	5800	17	3.1
Zinc	23000	350000	390	70
Mercury	11	46	0.014 J	0.017 U
1,1,1-Trichloroethane	8100	36000	0.46 U	0.065 U
1,1,2,2-Tetrachloroethane	60	270	0.46 U	0.065 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.46 U	0.065 U
1,1,2-Trichloroethane	1.5	6.3	0.46 U	0.065 U
1,1-Dichloroethane	360	1600	0.46 U	0.065 U
1,1-Dichloroethene	230	1000	0.46 U	0.065 U
1,2,4-Trichlorobenzene	58	260	0.46 U	0.065 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	2.3 U	0.32 U
1,2-Dibromoethane	3.6	16	0.46 U	0.065 U
1,2-Dichlorobenzene	1800	9300	0.46 U	0.065 U
1,2-Dichloroethane	31	140	0.46 U	0.065 U
1,2-Dichloropropane	16	66	0.46 U	0.065 U
1,3-Dichlorobenzene	NA	NA	0.46 U	0.065 U
1,4-Dichlorobenzene	260	1100	0.46 U	0.065 U
2-Hexanone	200	1300	2.3 U	0.32 U
Acetone	61000	670000	4 J	0.51 J
Benzene	82	420	0.12 U	0.17
Bromodichloromethane	29	130	R	R
Bromoform	1600	8600	0.46 U	0.065 U
Bromomethane	6.8	30	1.4 U	0.19 U
Carbon disulfide	770	3500	0.92 U	0.13 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-01-20190808	JCF-SOIL-03-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.46 U	0.065 U
Chlorobenzene	280	1300	0.46 U	0.065 U
Chloroethane	14000	57000	0.46 U	0.065 U
Chloroform	32	140	0.92 U	0.13 U
Chloromethane	110	460	0.46 U	0.065 U
cis-1,2-Dichloroethene	160	2300	0.46 U	0.065 U
cis-1,3-Dichloropropene	NA	NA	0.46 U	0.065 U
Cyclohexane	6500	27000	0.46 U	0.065 U
Dibromochloromethane	830	3900	0.46 U	0.065 U
Dichlorodifluoromethane	87	370	1.4 U	0.19 U
Ethylbenzene	580	2500	0.12 U	0.14
Isopropylbenzene	1900	9900	0.46 U	0.065 U
Methyl acetate	78000	1200000	810	0.51
Methyl Ethyl Ketone	27000	190000	2.3 U	0.32 U
methyl isobutyl ketone	33000	140000	2.3 U	0.32 U
Methyl tert-butyl ether	4700	21000	0.46 U	0.065 U
Methylcyclohexane	NA	NA	0.46 U	0.065 U
Methylene Chloride	350	3200	2.3 U	0.32 U
Styrene	6000	35000	0.46 U	0.15
Tetrachloroethene	81	390	0.46 U	0.69
Toluene	4900	47000	0.12	0.1
trans-1,2-Dichloroethene	1600	23000	0.46 U	0.065 U
trans-1,3-Dichloropropene	NA	NA	0.46 U	0.065 U
Trichloroethene	4.1	19	0.23 U	0.032 U
Trichlorofluoromethane	23000	350000	0.46 U	0.065 U
Vinyl chloride	5.9	170	0.46 U	0.065 U
Xylenes, Total	580	2500	0.23 U	0.58
1,1'-Biphenyl	47	200	2.6 U	25 U
2,2'-oxybis[1-chloropropane]	3100	47000	2.6 UJ	25 UJ
2,4,5-Trichlorophenol	6300	82000	5.1 U	50 U
2,4,6-Trichlorophenol	63	820	5.1 U	50 U
2,4-Dichlorophenol	190	2500	5.1 U	50 U
2,4-Dimethylphenol	1300	16000	5.1 U	50 U
2,4-Dinitrophenol	130	1600	10 U	100 U
2,4-Dinitrotoluene	130	740	2.6 U	25 U
2,6-Dinitrotoluene	19	150	2.6 U	25 U
2-Chloronaphthalene	4800	60000	2.6 U	25 U
2-Chlorophenol	390	5800	2.6 U	25 U
2-Methylnaphthalene	240	3000	0.65 J	2.4 J
2-Methylphenol	3200	41000	2.6 U	25 U
2-Nitroaniline	630	8000	2.6 U	25 U
2-Nitrophenol	NA	NA	5.1 U	50 U
3 & 4 Methylphenol	NA	NA	1.5 J	25 U
3,3'-Dichlorobenzidine	120	510	2.6 U	25 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-01-20190808	JCF-SOIL-03-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	5.1 U	50 U
4,6-Dinitro-2-methylphenol	5.1	66	10 U	100 U
4-Bromophenyl phenyl ether	NA	NA	2.6 U	25 U
4-Chloro-3-methylphenol	6300	82000	5.1 U	50 U
4-Chloroaniline	250	1100	10 U	100 U
4-Chlorophenyl phenyl ether	NA	NA	2.6 U	25 U
4-Nitroaniline	250	3300	5.1 U	50 U
4-Nitrophenol	NA	NA	10 U	100 U
Acenaphthene	3600	45000	0.25 J	5 U
Acenaphthylene	NA	NA	1.7	5.1
Acetophenone	7800	120000	5.1 UJ	50 UJ
Anthracene	18000	230000	1.7 U	5 U
Atrazine	240	1000	5.1 U	50 U
Benzaldehyde	7800	82000	21 U	200 U
Benzo[a]anthracene	110	2100	0.51 U	2.7 J
Benzo[a]pyrene	11	210	1.3 J+	4 J+
Benzo[b]fluoranthene	110	2100	0.76 J+	5 UJ
Benzo[g,h,i]perylene	NA	NA	0.3 J+	5 UJ
Benzo[k]fluoranthene	1100	21000	0.81 J+	5 UJ
Bis(2-chloroethoxy)methane	190	2500	2.6 U	25 U
Bis(2-chloroethyl)ether	23	100	2.6 UJ	25 UJ
Bis(2-ethylhexyl) phthalate	1300	16000	2.6 U	25 U
Butyl benzyl phthalate	13000	120000	2.6 U	25 U
Caprolactam	31000	400000	5.1 U	50 U
Carbazole	NA	NA	2.6 U	25 U
Chrysene	11000	210000	0.51 UJ	5 UJ
Dibenz(a,h)anthracene	11	210	0.51 UJ	5 UJ
Dibenzofuran	73	1000	2.6 U	25 U
Diethyl phthalate	51000	660000	2.6 U	25 U
Dimethyl phthalate	NA	NA	2.6 U	25 U
Di-n-butyl phthalate	6300	82000	2.6 U	25 U
Di-n-octyl phthalate	630	8200	2.6 U	25 U
Fluoranthene	2400	30000	4	5.7
Fluorene	2400	30000	0.87	4.1 J
Hexachlorobenzene	21	96	1 U	10 U
Hexachlorobutadiene	78	530	2.6 U	25 U
Hexachlorocyclopentadiene	1.8	7.5	10 UJ	100 UJ
Hexachloroethane	45	460	2.6 U	25 U
Indeno[1,2,3-cd]pyrene	110	2100	0.27 J+	5 UJ
Isophorone	13000	160000	2.6 U	25 U
Naphthalene	130	590	1.6	5.9
Nitrobenzene	130	1300	0.51 U	5 U
N-Nitrosodi-n-propylamine	7.8	33	1 U	10 U
N-Nitrosodiphenylamine	11000	47000	2.6 U	25 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-01-20190808	JCF-SOIL-03-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	10 U	100 U
Phenanthrene	NA	NA	6.8	12
Phenol	19000	250000	2.6 U	25 U
Pyrene	1800	23000	5.3	15
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	0.41 NJ
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	6.9 NJ	--
1-Hexadecene	NA	NA	--	120 NJ
1-Octanol	NA	NA	--	--
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	96 NJ	5.7 NJ
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	11 NJ	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	32 NJ	1.1 NJ
3-Penten-2-one, 4-methyl-	NA	NA	220 NJ	28 NJ
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	0.75 NJ
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	--
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	--	--
Hexanoic acid, 2-ethyl-	NA	NA	17 NJ	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	1.2 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	0.65 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-01-20190808	JCF-SOIL-03-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	--	1.6 NJ
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	0.52 NJ
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	1.1 NJ
Naphthalene, decahydro-, trans-	NA	NA	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	--	--
Octanoic acid, methyl ester	NA	NA	--	0.55 NJ
Phosphoric acid tributyl ester	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-04-20190808	JCF-SOIL-06-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	15000	1600
Antimony	31	470	2 J-	2.5
Arsenic	35	300	7.7	0.89 J
Barium	15000	220000	100 J	19
Beryllium	160	2300	0.81	0.43 U
Cadmium	71	980	0.7	0.25 J+
Calcium	NA	NA	38000 J	17000
Chromium	NA	NA	21	6.3
Cobalt	23	350	14	0.96
Copper	3100	47000	29 J	10
Iron	55000	820000	20000 J	4600
Lead	400	800	45	5.3
Magnesium	NA	NA	24000 J	9400
Manganese	1800	26000	410 J	85
Nickel	1500	22000	23	5.9
Potassium	NA	NA	2500 J+	360
Selenium	390	5800	1.2 U	1.1 U
Silver	390	5800	3.3	0.19 J
Sodium	NA	NA	700	210
Thallium	0.78	12	2.5	1.1 U
Vanadium	390	5800	32 J	21
Zinc	23000	350000	170	620
Mercury	11	46	0.061 J-	0.019 U
1,1,1-Trichloroethane	8100	36000	0.002 U	0.082 U
1,1,2,2-Tetrachloroethane	60	270	0.002 U	0.082 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.002 U	0.082 U
1,1,2-Trichloroethane	1.5	6.3	0.002 U	0.082 U
1,1-Dichloroethane	360	1600	0.002 U	0.082 U
1,1-Dichloroethene	230	1000	0.002 U	0.082 U
1,2,4-Trichlorobenzene	58	260	0.00076 J-	0.082 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.0049 U	0.41 U
1,2-Dibromoethane	3.6	16	0.002 U	0.082 U
1,2-Dichlorobenzene	1800	9300	0.002 UJ	0.082 U
1,2-Dichloroethane	31	140	0.0049 U	0.082 U
1,2-Dichloropropane	16	66	0.002 U	0.082 U
1,3-Dichlorobenzene	NA	NA	0.002 UJ	0.082 U
1,4-Dichlorobenzene	260	1100	0.002 UJ	0.082 U
2-Hexanone	200	1300	0.0049 U	0.41 U
Acetone	61000	670000	2	0.48 J
Benzene	82	420	0.0075	0.57
Bromodichloromethane	29	130	R	R
Bromoform	1600	8600	0.002 U	0.082 U
Bromomethane	6.8	30	0.0049 U	0.24 U
Carbon disulfide	770	3500	0.0049 U	0.16 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-04-20190808	JCF-SOIL-06-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.002 U	0.082 U
Chlorobenzene	280	1300	0.002 U	0.082 U
Chloroethane	14000	57000	0.0049 U	0.082 U
Chloroform	32	140	0.002 U	0.16 U
Chloromethane	110	460	0.0049 U	0.082 U
cis-1,2-Dichloroethene	160	2300	0.002 U	0.082 U
cis-1,3-Dichloropropene	NA	NA	0.002 U	0.082 U
Cyclohexane	6500	27000	0.002 UJ	0.082 U
Dibromochloromethane	830	3900	0.002 U	0.082 U
Dichlorodifluoromethane	87	370	0.0049 U	0.24 U
Ethylbenzene	580	2500	0.0028	0.19
Isopropylbenzene	1900	9900	0.002 UJ	0.082 U
Methyl acetate	78000	1200000	0.025 U	0.46
Methyl Ethyl Ketone	27000	190000	0.11	0.41 U
methyl isobutyl ketone	33000	140000	0.0049 U	0.41 U
Methyl tert-butyl ether	4700	21000	0.002 U	0.082 U
Methylcyclohexane	NA	NA	0.002 UJ	0.082 U
Methylene Chloride	350	3200	0.0049 U	0.41 U
Styrene	6000	35000	0.0011 J-	1.3
Tetrachloroethene	81	390	0.018 J-	0.082 U
Toluene	4900	47000	0.0021	2.4
trans-1,2-Dichloroethene	1600	23000	0.002 U	0.082 U
trans-1,3-Dichloropropene	NA	NA	0.002 U	0.082 U
Trichloroethene	4.1	19	0.002 U	0.041 U
Trichlorofluoromethane	23000	350000	0.0049 U	0.082 U
Vinyl chloride	5.9	170	0.002 U	0.082 U
Xylenes, Total	580	2500	0.011	0.14 U
1,1'-Biphenyl	47	200	2.3 U	6.2 U
2,2'-oxybis[1-chloropropane]	3100	47000	2.3 UJ	6.2 UJ
2,4,5-Trichlorophenol	6300	82000	4.6 U	12 U
2,4,6-Trichlorophenol	63	820	4.6 U	12 U
2,4-Dichlorophenol	190	2500	4.6 U	12 U
2,4-Dimethylphenol	1300	16000	4.6 U	12 U
2,4-Dinitrophenol	130	1600	9.3 U	25 U
2,4-Dinitrotoluene	130	740	2.3 U	6.2 U
2,6-Dinitrotoluene	19	150	2.3 U	6.2 U
2-Chloronaphthalene	4800	60000	2.3 U	6.2 U
2-Chlorophenol	390	5800	2.3 U	6.2 U
2-Methylnaphthalene	240	3000	0.93 U	0.41 J
2-Methylphenol	3200	41000	2.3 U	6.2 U
2-Nitroaniline	630	8000	2.3 U	6.2 U
2-Nitrophenol	NA	NA	4.6 U	12 U
3 & 4 Methylphenol	NA	NA	2.3 U	6.2 U
3,3'-Dichlorobenzidine	120	510	2.3 U	6.2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-04-20190808	JCF-SOIL-06-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	4.6 U	12 U
4,6-Dinitro-2-methylphenol	5.1	66	9.3 U	25 U
4-Bromophenyl phenyl ether	NA	NA	2.3 U	6.2 U
4-Chloro-3-methylphenol	6300	82000	4.6 U	12 U
4-Chloroaniline	250	1100	9.3 U	25 U
4-Chlorophenyl phenyl ether	NA	NA	2.3 U	6.2 U
4-Nitroaniline	250	3300	4.6 U	12 U
4-Nitrophenol	NA	NA	9.3 U	25 U
Acenaphthene	3600	45000	0.46 U	1.2 U
Acenaphthylene	NA	NA	0.46 U	1.8
Acetophenone	7800	120000	4.6 UJ	12 UJ
Anthracene	18000	230000	0.46 U	1.2 U
Atrazine	240	1000	4.6 U	12 U
Benzaldehyde	7800	82000	19 U	50 U
Benzo[a]anthracene	110	2100	0.49	1.2 U
Benzo[a]pyrene	11	210	0.68	0.89 J
Benzo[b]fluoranthene	110	2100	1	1.2 U
Benzo[g,h,i]perylene	NA	NA	0.62	1.2 U
Benzo[k]fluoranthene	1100	21000	0.34 J	1.2 U
Bis(2-chloroethoxy)methane	190	2500	2.3 U	6.2 U
Bis(2-chloroethyl)ether	23	100	2.3 UJ	6.2 UJ
Bis(2-ethylhexyl) phthalate	1300	16000	2.3 U	6.2 U
Butyl benzyl phthalate	13000	120000	2.3 U	6.2 U
Caprolactam	31000	400000	4.6 U	12 U
Carbazole	NA	NA	2.3 U	6.2 U
Chrysene	11000	210000	0.79	1.2 U
Dibenz(a,h)anthracene	11	210	0.12 J	1.2 U
Dibenzofuran	73	1000	2.6 U	6.2 U
Diethyl phthalate	51000	660000	2.3 U	6.2 U
Dimethyl phthalate	NA	NA	2.3 U	6.2 U
Di-n-butyl phthalate	6300	82000	2.3 U	6.2 U
Di-n-octyl phthalate	630	8200	2.3 U	6.2 U
Fluoranthene	2400	30000	1.3	1.7
Fluorene	2400	30000	0.46 U	0.58 J
Hexachlorobenzene	21	96	0.93 U	2.5 U
Hexachlorobutadiene	78	530	2.3 U	6.2 U
Hexachlorocyclopentadiene	1.8	7.5	9.3 UJ	25 UJ
Hexachloroethane	45	460	2.3 U	6.2 U
Indeno[1,2,3-cd]pyrene	110	2100	0.51	1.2 U
Isophorone	13000	160000	2.3 U	6.2 U
Naphthalene	130	590	0.46 U	2
Nitrobenzene	130	1300	0.46 U	1.2 U
N-Nitrosodi-n-propylamine	7.8	33	0.93 U	2.5 U
N-Nitrosodiphenylamine	11000	47000	2.3 U	6.2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-04-20190808	JCF-SOIL-06-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	9.3 U	25 U
Phenanthrene	NA	NA	0.51	2.7
Phenol	19000	250000	2.3 U	6.2 U
Pyrene	1800	23000	1.1	2.7
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	--
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	--	--
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	--	--
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	3.1 NJ	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	--	--
3-Penten-2-one, 4-methyl-	NA	NA	7.8 NJ	--
Azulene	NA	NA	--	0.77 NJ
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	--
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	--	--
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-04-20190808	JCF-SOIL-06-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	--
Naphthalene, decahydro-, trans-	NA	NA		--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	--	--
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-07-20190808	JCF-SOIL-08-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	11000	13000
Antimony	31	470	1.1 J	0.86 J
Arsenic	35	300	6	9.7
Barium	15000	220000	63	74
Beryllium	160	2300	0.46	0.71
Cadmium	71	980	0.35 J+	0.46 J+
Calcium	NA	NA	10000	30000
Chromium	NA	NA	15	22
Cobalt	23	350	5.7	11
Copper	3100	47000	19	24
Iron	55000	820000	13000	21000
Lead	400	800	14	19
Magnesium	NA	NA	6200	18000
Manganese	1800	26000	270	520
Nickel	1500	22000	14	26
Potassium	NA	NA	2400	2700
Selenium	390	5800	1.1 U	1.2 U
Silver	390	5800	1.7	2.6
Sodium	NA	NA	720	620
Thallium	0.78	12	1.4	2.3
Vanadium	390	5800	22	27
Zinc	23000	350000	220	240
Mercury	11	46	0.021	0.024
1,1,1-Trichloroethane	8100	36000	0.089 U	0.1 U
1,1,2,2-Tetrachloroethane	60	270	0.089 U	0.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.089 U	0.1 U
1,1,2-Trichloroethane	1.5	6.3	0.089 U	0.1 U
1,1-Dichloroethane	360	1600	0.089 U	0.1 U
1,1-Dichloroethene	230	1000	0.089 U	0.1 U
1,2,4-Trichlorobenzene	58	260	0.089 U	0.1 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.45 U	0.5 U
1,2-Dibromoethane	3.6	16	0.089 U	0.1 U
1,2-Dichlorobenzene	1800	9300	0.089 U	0.1 U
1,2-Dichloroethane	31	140	0.089 U	0.1 U
1,2-Dichloropropane	16	66	0.089 U	0.1 U
1,3-Dichlorobenzene	NA	NA	0.089 U	0.1 U
1,4-Dichlorobenzene	260	1100	0.089 U	0.1 U
2-Hexanone	200	1300	0.45 U	0.5 U
Acetone	61000	670000	3	1.8 J
Benzene	82	420	0.34	0.26 J
Bromodichloromethane	29	130	R	R
Bromoform	1600	8600	0.089 U	0.1 U
Bromomethane	6.8	30	0.27 U	0.3 U
Carbon disulfide	770	3500	0.18 U	0.12 J

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-07-20190808	JCF-SOIL-08-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.089 U	0.1 U
Chlorobenzene	280	1300	0.089 U	0.1 U
Chloroethane	14000	57000	0.089 U	0.1 U
Chloroform	32	140	0.18 U	0.2 U
Chloromethane	110	460	0.089 U	0.1 U
cis-1,2-Dichloroethene	160	2300	0.089 U	0.1 U
cis-1,3-Dichloropropene	NA	NA	0.089 U	0.1 U
Cyclohexane	6500	27000	0.089 U	0.1 U
Dibromochloromethane	830	3900	0.089 U	0.1 U
Dichlorodifluoromethane	87	370	0.27 U	0.3 U
Ethylbenzene	580	2500	0.075	0.38 J
Isopropylbenzene	1900	9900	0.089 U	0.1 U
Methyl acetate	78000	1200000	0.73	0.57
Methyl Ethyl Ketone	27000	190000	0.45 U	0.5 U
methyl isobutyl ketone	33000	140000	0.45 U	0.5 U
Methyl tert-butyl ether	4700	21000	0.089 U	0.1 U
Methylcyclohexane	NA	NA	0.089 U	0.1 U
Methylene Chloride	350	3200	0.45 U	0.5 U
Styrene	6000	35000	0.16	0.18 J
Tetrachloroethene	81	390	0.38	0.86 J
Toluene	4900	47000	0.23	0.19 J
trans-1,2-Dichloroethene	1600	23000	0.089 U	0.1 U
trans-1,3-Dichloropropene	NA	NA	0.089 U	0.1 U
Trichloroethene	4.1	19	0.045 U	0.05 U
Trichlorofluoromethane	23000	350000	0.089 U	0.1 U
Vinyl chloride	5.9	170	0.089 U	0.1 U
Xylenes, Total	580	2500	0.34	2 J
1,1'-Biphenyl	47	200	5.6 U	6.3 U
2,2'-oxybis[1-chloropropane]	3100	47000	5.6 UJ	6.3 UJ
2,4,5-Trichlorophenol	6300	82000	11 U	12 U
2,4,6-Trichlorophenol	63	820	11 U	12 U
2,4-Dichlorophenol	190	2500	11 U	12 U
2,4-Dimethylphenol	1300	16000	11 U	12 U
2,4-Dinitrophenol	130	1600	23 U	25 U
2,4-Dinitrotoluene	130	740	5.6 U	6.3 U
2,6-Dinitrotoluene	19	150	5.6 U	6.3 U
2-Chloronaphthalene	4800	60000	5.6 U	6.3 U
2-Chlorophenol	390	5800	5.6 U	6.3 U
2-Methylnaphthalene	240	3000	0.47 J	0.72 J
2-Methylphenol	3200	41000	5.6 U	6.3 U
2-Nitroaniline	630	8000	5.6 U	6.3 U
2-Nitrophenol	NA	NA	11 U	12 U
3 & 4 Methylphenol	NA	NA	5.6 U	6.3 U
3,3'-Dichlorobenzidine	120	510	5.6 U	6.3 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-07-20190808	JCF-SOIL-08-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	11 U	12 U
4,6-Dinitro-2-methylphenol	5.1	66	23 U	25 U
4-Bromophenyl phenyl ether	NA	NA	5.6 U	6.3 U
4-Chloro-3-methylphenol	6300	82000	11 U	12 U
4-Chloroaniline	250	1100	23 U	25 U
4-Chlorophenyl phenyl ether	NA	NA	5.6 U	6.3 U
4-Nitroaniline	250	3300	11 U	12 U
4-Nitrophenol	NA	NA	23 U	25 U
Acenaphthene	3600	45000	1.1 U	1.2 U
Acenaphthylene	NA	NA	1.1	1.2 U
Acetophenone	7800	120000	11 UJ	12 UJ
Anthracene	18000	230000	1.1 U	1.2 U
Atrazine	240	1000	11 U	12 U
Benzaldehyde	7800	82000	45 U	50 U
Benzo[a]anthracene	110	2100	1.1 U	2.8 J
Benzo[a]pyrene	11	210	1.1 U	3 J
Benzo[b]fluoranthene	110	2100	1.1 U	5.6 J
Benzo[g,h,i]perylene	NA	NA	1.1 U	1.5 U
Benzo[k]fluoranthene	1100	21000	1.1 U	2
Bis(2-chloroethoxy)methane	190	2500	5.6 U	6.3 U
Bis(2-chloroethyl)ether	23	100	5.6 UJ	6.3 UJ
Bis(2-ethylhexyl) phthalate	1300	16000	5.6 U	6.3 U
Butyl benzyl phthalate	13000	120000	5.6 U	6.3 U
Caprolactam	31000	400000	11 U	12 U
Carbazole	NA	NA	5.6 U	6.3 U
Chrysene	11000	210000	1.1 U	3.5 J
Dibenz(a,h)anthracene	11	210	1.1 U	1.2 U
Dibenzofuran	73	1000	5.6 U	6.3 U
Diethyl phthalate	51000	660000	5.6 U	6.3 U
Dimethyl phthalate	NA	NA	5.6 U	6.3 U
Di-n-butyl phthalate	6300	82000	5.6 U	6.3 U
Di-n-octyl phthalate	630	8200	5.6 U	6.3 U
Fluoranthene	2400	30000	0.54 J	8.6 J
Fluorene	2400	30000	0.44 J	2.1
Hexachlorobenzene	21	96	2.3 U	2.5 U
Hexachlorobutadiene	78	530	5.6 U	6.3 U
Hexachlorocyclopentadiene	1.8	7.5	23 UJ	25 UJ
Hexachloroethane	45	460	5.6 U	6.3 U
Indeno[1,2,3-cd]pyrene	110	2100	1.1 U	1.4
Isophorone	13000	160000	5.6 U	6.3 U
Naphthalene	130	590	2	1.6
Nitrobenzene	130	1300	1.1 U	1.2 U
N-Nitrosodi-n-propylamine	7.8	33	2.3 U	2.5 U
N-Nitrosodiphenylamine	11000	47000	5.6 U	6.3 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-07-20190808	JCF-SOIL-08-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	23 U	25 U
Phenanthrene	NA	NA	1.3	5.9 J
Phenol	19000	250000	5.6 U	6.3 U
Pyrene	1800	23000	0.91 J	8 J
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	2.1 NJ
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	--	--
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	2.1 NJ
1-Pentene, 2,4,4-trimethyl-	NA	NA	80 NJ	29 NJ
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	28 NJ	4 NJ
3-Penten-2-one, 4-methyl-	NA	NA	--	11 NJ
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	0.86 NJ
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	--
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	15 NJ	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	--	--
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	2.1 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	1 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	0.88 NJ

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-07-20190808	JCF-SOIL-08-20190808
Matrix			Soil	Soil
Date			8/8/2019	8/8/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	0.97 NJ
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	1.8 NJ
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	--	4.5 NJ
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	--
Naphthalene, decahydro-, trans-	NA	NA	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	--	--
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-08-20190808-D	JCF-SOIL-09-20190809
Matrix			Soil	Soil
Date			8/8/2019	8/9/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	14000	12000
Antimony	31	470	1.1 J	2.7 U
Arsenic	35	300	9.8	9.6
Barium	15000	220000	72	86
Beryllium	160	2300	0.77	0.61
Cadmium	71	980	0.47 J+	0.41 J+
Calcium	NA	NA	28000	21000
Chromium	NA	NA	23	19
Cobalt	23	350	11	8.7
Copper	3100	47000	23	22
Iron	55000	820000	22000	20000
Lead	400	800	19	20
Magnesium	NA	NA	16000	13000
Manganese	1800	26000	510	610
Nickel	1500	22000	26	21
Potassium	NA	NA	2700	2200
Selenium	390	5800	0.82 J	1.3 U
Silver	390	5800	2.7	2.6
Sodium	NA	NA	330	390
Thallium	0.78	12	2.3	0.77 J
Vanadium	390	5800	27	27
Zinc	23000	350000	170	130
Mercury	11	46	0.024	0.027
1,1,1-Trichloroethane	8100	36000	0.096 U	0.081 U
1,1,2,2-Tetrachloroethane	60	270	0.096 U	0.081 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.096 U	0.081 U
1,1,2-Trichloroethane	1.5	6.3	0.096 U	R
1,1-Dichloroethane	360	1600	0.096 U	0.081 U
1,1-Dichloroethene	230	1000	0.096 U	0.081 U
1,2,4-Trichlorobenzene	58	260	0.096 U	0.081 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.48 U	0.41 U
1,2-Dibromoethane	3.6	16	0.096 U	0.081 U
1,2-Dichlorobenzene	1800	9300	0.096 U	0.081 U
1,2-Dichloroethane	31	140	0.096 U	0.081 U
1,2-Dichloropropane	16	66	0.096 U	0.081 U
1,3-Dichlorobenzene	NA	NA	0.096 U	0.081 U
1,4-Dichlorobenzene	260	1100	0.096 U	0.081 U
2-Hexanone	200	1300	0.48 U	0.41 U
Acetone	61000	670000	0.63 J	2.2
Benzene	82	420	0.045 UJ	0.057
Bromodichloromethane	29	130	R	R
Bromoform	1600	8600	0.096 U	0.081 U
Bromomethane	6.8	30	0.29 U	0.24 U
Carbon disulfide	770	3500	0.19 U	0.16 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-08-20190808-D	JCF-SOIL-09-20190809
Matrix			Soil	Soil
Date			8/8/2019	8/9/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.096 U	0.081 U
Chlorobenzene	280	1300	0.096 U	0.081 U
Chloroethane	14000	57000	0.096 U	0.081 U
Chloroform	32	140	0.19 U	0.16 U
Chloromethane	110	460	0.096 U	0.081 U
cis-1,2-Dichloroethene	160	2300	0.096 U	0.081 U
cis-1,3-Dichloropropene	NA	NA	0.096 U	0.081 U
Cyclohexane	6500	27000	0.096 U	0.081 U
Dibromochloromethane	830	3900	0.096 U	0.081 U
Dichlorodifluoromethane	87	370	0.29 U	0.24 U
Ethylbenzene	580	2500	0.088 J	0.18
Isopropylbenzene	1900	9900	0.096 U	0.081 U
Methyl acetate	78000	1200000	0.48 U	0.24 J
Methyl Ethyl Ketone	27000	190000	0.48 U	0.41 U
methyl isobutyl ketone	33000	140000	0.48 U	0.41 U
Methyl tert-butyl ether	4700	21000	0.096 U	0.081 U
Methylcyclohexane	NA	NA	0.096 U	0.081 U
Methylene Chloride	350	3200	0.48 U	0.41 U
Styrene	6000	35000	0.045 J	0.061 J
Tetrachloroethene	81	390	0.18 UJ	0.23
Toluene	4900	47000	0.055 J	0.047
trans-1,2-Dichloroethene	1600	23000	0.096 U	0.081 U
trans-1,3-Dichloropropene	NA	NA	0.096 U	0.081 U
Trichloroethene	4.1	19	0.048 U	0.041 U
Trichlorofluoromethane	23000	350000	0.096 U	0.081 U
Vinyl chloride	5.9	170	0.096 U	0.081 U
Xylenes, Total	580	2500	0.44 J	0.92
1,1'-Biphenyl	47	200	6 U	2.2 U
2,2'-oxybis[1-chloropropane]	3100	47000	6 UJ	2.2 U
2,4,5-Trichlorophenol	6300	82000	12 U	4.3 U
2,4,6-Trichlorophenol	63	820	12 U	4.3 U
2,4-Dichlorophenol	190	2500	12 U	4.3 U
2,4-Dimethylphenol	1300	16000	12 U	4.3 U
2,4-Dinitrophenol	130	1600	24 U	8.8 U
2,4-Dinitrotoluene	130	740	6 U	2.2 U
2,6-Dinitrotoluene	19	150	6 U	2.2 U
2-Chloronaphthalene	4800	60000	6 U	2.2 U
2-Chlorophenol	390	5800	6 U	2.2 U
2-Methylnaphthalene	240	3000	0.52 J	0.23 J
2-Methylphenol	3200	41000	6 U	2.2 U
2-Nitroaniline	630	8000	6 U	2.2 U
2-Nitrophenol	NA	NA	12 U	4.3 U
3 & 4 Methylphenol	NA	NA	6 U	2.2 U
3,3'-Dichlorobenzidine	120	510	6 U	2.2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-08-20190808-D	JCF-SOIL-09-20190809
Matrix			Soil	Soil
Date			8/8/2019	8/9/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	12 U	4.3 U
4,6-Dinitro-2-methylphenol	5.1	66	24 U	8.8 U
4-Bromophenyl phenyl ether	NA	NA	6 U	2.2 U
4-Chloro-3-methylphenol	6300	82000	12 U	4.3 U
4-Chloroaniline	250	1100	24 U	8.8 U
4-Chlorophenyl phenyl ether	NA	NA	6 U	2.2 U
4-Nitroaniline	250	3300	12 U	4.3 U
4-Nitrophenol	NA	NA	24 U	8.8 U
Acenaphthene	3600	45000	1.2 U	0.43 U
Acenaphthylene	NA	NA	1.2 U	0.43 U
Acetophenone	7800	120000	12 UJ	4.3 U
Anthracene	18000	230000	1.2 U	0.43 U
Atrazine	240	1000	12 U	4.3 U
Benzaldehyde	7800	82000	48 U	18 UJ
Benzo[a]anthracene	110	2100	0.5 J	1.1
Benzo[a]pyrene	11	210	0.57 J	1.2
Benzo[b]fluoranthene	110	2100	0.81 J	2.2
Benzo[g,h,i]perylene	NA	NA	1.2 U	0.52
Benzo[k]fluoranthene	1100	21000	1.2 U	0.73
Bis(2-chloroethoxy)methane	190	2500	6 U	2.2 U
Bis(2-chloroethyl)ether	23	100	6 UJ	2.2 U
Bis(2-ethylhexyl) phthalate	1300	16000	6 U	2.2 U
Butyl benzyl phthalate	13000	120000	6 U	2.2 U
Caprolactam	31000	400000	12 U	4.3 UJ
Carbazole	NA	NA	6 U	2.2 U
Chrysene	11000	210000	0.54 J	1.6
Dibenz(a,h)anthracene	11	210	1.2 U	0.43 U
Dibenzofuran	73	1000	6 U	2.2 U
Diethyl phthalate	51000	660000	6 U	2.2 U
Dimethyl phthalate	NA	NA	6 U	2.2 U
Di-n-butyl phthalate	6300	82000	6 U	2.2 U
Di-n-octyl phthalate	630	8200	6 U	2.2 U
Fluoranthene	2400	30000	1.3 J	2.7
Fluorene	2400	30000	1.2 U	0.76 U
Hexachlorobenzene	21	96	2.4 U	0.88 U
Hexachlorobutadiene	78	530	6 U	2.2 U
Hexachlorocyclopentadiene	1.8	7.5	24 UJ	8.8 U
Hexachloroethane	45	460	6 U	2.2 U
Indeno[1,2,3-cd]pyrene	110	2100	1.2 U	0.43 U
Isophorone	13000	160000	6 U	2.2 U
Naphthalene	130	590	1.3	0.31 J
Nitrobenzene	130	1300	1.2 U	0.43 U
N-Nitrosodi-n-propylamine	7.8	33	2.4 U	0.88 U
N-Nitrosodiphenylamine	11000	47000	6 U	2.2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-08-20190808-D	JCF-SOIL-09-20190809
Matrix			Soil	Soil
Date			8/8/2019	8/9/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	24 U	8.8 U
Phenanthrene	NA	NA	1.4 J	1.8
Phenol	19000	250000	6 U	2.2 U
Pyrene	1800	23000	1.8 J	4.3
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	6.5 NJ	1.6 NJ
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	--	--
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	1.2 NJ	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	1.1 NJ	2.4 NJ
1-Pentene, 2,4,4-trimethyl-	NA	NA	0.65 NJ	160 NJ
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	--	--
3-Penten-2-one, 4-methyl-	NA	NA	--	10 NJ
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	0.61 NJ
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	2.8 NJ
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	20 NJ	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	8.4 NJ	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	--	--
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	1.7 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	1.2 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	0.62 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-08-20190808-D	JCF-SOIL-09-20190809
Matrix			Soil	Soil
Date			8/8/2019	8/9/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	2.1 NJ	3.5 NJ
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	2.1 NJ
Naphthalene, decahydro-, trans-	NA	NA	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	--	--
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	33 NJ
Undecane	NA	NA	--	--

Notes:

Highlighted sample results indicate an exceedance corresponding to the associated screening level.

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

RML = Removal Management Level

mg/kg = Milligram per Kilogram

TQH = Target Hazard Quotients

NA = Not Applicable

-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10-20190809	JCF-SOIL-10B-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	15000	12000
Antimony	31	470	2.2 U	2.2 U
Arsenic	35	300	13	15
Barium	15000	220000	170	170
Beryllium	160	2300	0.77	0.65
Cadmium	71	980	0.47 J+	0.5 J+
Calcium	NA	NA	4700	11000
Chromium	NA	NA	20	16
Cobalt	23	350	16	16
Copper	3100	47000	22	20
Iron	55000	820000	28000	27000
Lead	400	800	24	25
Magnesium	NA	NA	4200	7200
Manganese	1800	26000	1400	1600
Nickel	1500	22000	31	27
Potassium	NA	NA	2700	2000
Selenium	390	5800	1.1	1.2
Silver	390	5800	3.5	2.5
Sodium	NA	NA	430	390
Thallium	0.78	12	0.91 J	0.66 J
Vanadium	390	5800	34	32
Zinc	23000	350000	97	120
Mercury	11	46	0.027	0.021
1,1,1-Trichloroethane	8100	36000	0.054 U	0.002 U
1,1,2,2-Tetrachloroethane	60	270	0.054 U	0.002 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.054 U	0.002 U
1,1,2-Trichloroethane	1.5	6.3	R	0.002 U
1,1-Dichloroethane	360	1600	0.054 U	0.002 U
1,1-Dichloroethene	230	1000	0.054 U	0.002 U
1,2,4-Trichlorobenzene	58	260	0.054 U	0.002 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.27 U	0.0051 U
1,2-Dibromoethane	3.6	16	0.054 U	0.002 U
1,2-Dichlorobenzene	1800	9300	0.054 U	0.002 U
1,2-Dichloroethane	31	140	0.054 U	0.0051 U
1,2-Dichloropropane	16	66	0.054 U	0.002 U
1,3-Dichlorobenzene	NA	NA	0.054 U	0.002 U
1,4-Dichlorobenzene	260	1100	0.054 U	0.002 U
2-Hexanone	200	1300	0.27 U	0.0051 U
Acetone	61000	670000	0.54 U	0.042
Benzene	82	420	0.015 U	0.0017 J
Bromodichloromethane	29	130	R	0.002 U
Bromoform	1600	8600	0.054 U	0.002 U
Bromomethane	6.8	30	0.16 U	0.0051 U
Carbon disulfide	770	3500	0.11 U	0.0051 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10-20190809	JCF-SOIL-10B-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.054 U	0.002 U
Chlorobenzene	280	1300	0.054 U	0.002 U
Chloroethane	14000	57000	0.054 U	0.0051 U
Chloroform	32	140	0.11 U	0.002 U
Chloromethane	110	460	0.054 U	0.0051 U
cis-1,2-Dichloroethene	160	2300	0.054 U	0.002 U
cis-1,3-Dichloropropene	NA	NA	0.054 U	0.002 U
Cyclohexane	6500	27000	0.054 U	0.002 U
Dibromochloromethane	830	3900	0.054 U	0.002 U
Dichlorodifluoromethane	87	370	0.16 U	0.0051 U
Ethylbenzene	580	2500	0.064	0.0061
Isopropylbenzene	1900	9900	0.054 U	0.002 U
Methyl acetate	78000	1200000	0.27 U	0.026 U
Methyl Ethyl Ketone	27000	190000	0.27 U	0.0051 U
methyl isobutyl ketone	33000	140000	0.27 U	0.0051 U
Methyl tert-butyl ether	4700	21000	0.054 U	0.002 U
Methylcyclohexane	NA	NA	0.054 U	0.002 U
Methylene Chloride	350	3200	0.27 U	0.0051 U
Styrene	6000	35000	0.054 U	0.0018 J
Tetrachloroethene	81	390	0.14	0.025
Toluene	4900	47000	0.02	0.0025
trans-1,2-Dichloroethene	1600	23000	0.054 U	0.002 U
trans-1,3-Dichloropropene	NA	NA	0.054 U	0.002 U
Trichloroethene	4.1	19	0.027 U	0.002 U
Trichlorofluoromethane	23000	350000	0.054 U	0.0051 U
Vinyl chloride	5.9	170	0.054 U	0.002 U
Xylenes, Total	580	2500	0.35	0.031
1,1'-Biphenyl	47	200	1.8 U	2 U
2,2'-oxybis[1-chloropropane]	3100	47000	1.8 U	2 U
2,4,5-Trichlorophenol	6300	82000	3.6 U	4 U
2,4,6-Trichlorophenol	63	820	3.6 U	4 U
2,4-Dichlorophenol	190	2500	3.6 U	4 U
2,4-Dimethylphenol	1300	16000	3.6 U	4 U
2,4-Dinitrophenol	130	1600	7.3 U	8.2 U
2,4-Dinitrotoluene	130	740	1.8 U	2 U
2,6-Dinitrotoluene	19	150	1.8 U	2 U
2-Chloronaphthalene	4800	60000	1.8 U	2 U
2-Chlorophenol	390	5800	1.8 U	2 U
2-Methylnaphthalene	240	3000	0.73 U	0.24 J
2-Methylphenol	3200	41000	1.8 U	2 U
2-Nitroaniline	630	8000	1.8 U	2 U
2-Nitrophenol	NA	NA	3.6 U	4 U
3 & 4 Methylphenol	NA	NA	1.8 U	2 U
3,3'-Dichlorobenzidine	120	510	1.8 U	2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10-20190809	JCF-SOIL-10B-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	3.6 U	4 U
4,6-Dinitro-2-methylphenol	5.1	66	7.3 U	8.2 U
4-Bromophenyl phenyl ether	NA	NA	1.8 U	2 U
4-Chloro-3-methylphenol	6300	82000	3.6 U	4 U
4-Chloroaniline	250	1100	7.3 U	8.2 U
4-Chlorophenyl phenyl ether	NA	NA	1.8 U	2 U
4-Nitroaniline	250	3300	3.6 U	4 U
4-Nitrophenol	NA	NA	7.3 U	8.2 U
Acenaphthene	3600	45000	0.36 U	0.4 U
Acenaphthylene	NA	NA	0.52	0.4 U
Acetophenone	7800	120000	3.6 U	4 U
Anthracene	18000	230000	0.36 U	0.28 J
Atrazine	240	1000	3.6 U	4 U
Benzaldehyde	7800	82000	15 UJ	16 UJ
Benzo[a]anthracene	110	2100	0.36 U	0.4 U
Benzo[a]pyrene	11	210	0.36 U	0.4 UJ
Benzo[b]fluoranthene	110	2100	0.36 U	0.4 UJ
Benzo[g,h,i]perylene	NA	NA	0.36 U	0.4 UJ
Benzo[k]fluoranthene	1100	21000	0.36 U	0.4 UJ
Bis(2-chloroethoxy)methane	190	2500	1.8 U	2 U
Bis(2-chloroethyl)ether	23	100	1.8 U	2 U
Bis(2-ethylhexyl) phthalate	1300	16000	1.8 U	2 U
Butyl benzyl phthalate	13000	120000	1.8 U	2 U
Caprolactam	31000	400000	3.6 UJ	4 UJ
Carbazole	NA	NA	1.8 U	2 U
Chrysene	11000	210000	0.36 U	0.22 J+
Dibenz(a,h)anthracene	11	210	0.36 U	0.4 UJ
Dibenzofuran	73	1000	1.8 U	2 U
Diethyl phthalate	51000	660000	1.8 U	2 U
Dimethyl phthalate	NA	NA	1.8 U	2 U
Di-n-butyl phthalate	6300	82000	1.8 U	2 U
Di-n-octyl phthalate	630	8200	1.8 U	2 UJ
Fluoranthene	2400	30000	0.31 J	0.4
Fluorene	2400	30000	0.36 U	0.49 U
Hexachlorobenzene	21	96	0.73 U	0.82 U
Hexachlorobutadiene	78	530	1.8 U	2 U
Hexachlorocyclopentadiene	1.8	7.5	7.3 U	8.2 U
Hexachloroethane	45	460	1.8 U	2 U
Indeno[1,2,3-cd]pyrene	110	2100	0.36 U	0.4 UJ
Isophorone	13000	160000	1.8 U	2 U
Naphthalene	130	590	0.36	0.55
Nitrobenzene	130	1300	0.36 U	0.4 U
N-Nitrosodi-n-propylamine	7.8	33	0.73 U	0.82 U
N-Nitrosodiphenylamine	11000	47000	1.8 U	2 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10-20190809	JCF-SOIL-10B-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	7.3 U	8.2 U
Phenanthrene	NA	NA	0.77	0.69
Phenol	19000	250000	1.8 U	2 U
Pyrene	1800	23000	1.1	1.1
1,2,4-Trimethylbenzene	NA	NA	--	0.0073 NJ
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	0.0071 NJ
1-Decanol	NA	NA	--	78 NJ
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	--	19 NJ
1-Undecanol	NA	NA	28 NJ	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	1.2 NJ	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	1.5 NJ	0.21 NJ
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	110 NJ	240 NJ
3-Penten-2-one, 4-methyl-	NA	NA	32 NJ	230 NJ
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	0.43 NJ	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	0.88 NJ	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	0.012 NJ
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	--
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	4 NJ	--
Decane	NA	NA	--	0.025 NJ
Decane, 4-methyl-	NA	NA	--	0.0078 NJ
D-Limonene	NA	NA	--	0.009 NJ
Dodecane	NA	NA	--	0.014 NJ
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	160 NJ	61 NJ
Hexadecanoic acid	NA	NA	--	--
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	0.02 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	0.43 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	0.9 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10-20190809	JCF-SOIL-10B-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	1.9 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	1.3 NJ	--
Naphthalene, decahydro-, trans-	NA	NA	--	0.012 NJ
Naphthalene, decahydro-2-methyl-	NA	NA	--	0.02 NJ
Octanoic Acid	NA	NA	--	--
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	7.6 NJ

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10C-20190809	JCF-SOIL-11-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	11000	14000
Antimony	31	470	2.1 U	2.1 U
Arsenic	35	300	12	9.6
Barium	15000	220000	140	160
Beryllium	160	2300	0.65	0.67
Cadmium	71	980	0.46 J+	0.52 J+
Calcium	NA	NA	13000	9500
Chromium	NA	NA	16	18
Cobalt	23	350	14	13
Copper	3100	47000	20	22
Iron	55000	820000	24000	22000
Lead	400	800	24	26
Magnesium	NA	NA	8300	6100
Manganese	1800	26000	1200	1200
Nickel	1500	22000	26	24
Potassium	NA	NA	1700	2000
Selenium	390	5800	1.2	1.2
Silver	390	5800	2.9	3.4
Sodium	NA	NA	370	610
Thallium	0.78	12	0.93 J	0.72 J
Vanadium	390	5800	27	33
Zinc	23000	350000	99	110
Mercury	11	46	0.03	0.028
1,1,1-Trichloroethane	8100	36000	0.002 U	0.0018 U
1,1,2,2-Tetrachloroethane	60	270	0.002 U	0.0018 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.002 U	0.0018 U
1,1,2-Trichloroethane	1.5	6.3	0.002 U	0.0018 U
1,1-Dichloroethane	360	1600	0.002 U	0.0018 U
1,1-Dichloroethene	230	1000	0.002 U	0.0018 U
1,2,4-Trichlorobenzene	58	260	0.002 U	0.0018 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.0051 U	0.0046 U
1,2-Dibromoethane	3.6	16	0.002 U	0.0018 U
1,2-Dichlorobenzene	1800	9300	0.002 U	0.0018 U
1,2-Dichloroethane	31	140	0.0051 U	0.0046 U
1,2-Dichloropropane	16	66	0.002 U	0.0018 U
1,3-Dichlorobenzene	NA	NA	0.002 U	0.0018 U
1,4-Dichlorobenzene	260	1100	0.002 U	0.0018 U
2-Hexanone	200	1300	0.0051 U	0.0046 U
Acetone	61000	670000	0.018 J	0.055
Benzene	82	420	0.002 U	0.0018 U
Bromodichloromethane	29	130	0.002 U	0.0018 U
Bromoform	1600	8600	0.002 U	0.0018 U
Bromomethane	6.8	30	0.0051 U	0.0046 U
Carbon disulfide	770	3500	0.0051 U	0.0046 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil	RMLs: Industrial Soil	JCF-SOIL-10C-20190809	JCF-SOIL-11-20190809
Matrix	Cancer Risk 10^{-4}	Cancer Risk 10^{-4}	Soil	Soil
Date	THQ = 1	THQ = 1	8/9/2019	8/9/2019
Analyte	(mg/kg)	(mg/kg)	mg/kg	mg/kg
Carbon tetrachloride	65	290	0.002 U	0.0018 U
Chlorobenzene	280	1300	0.002 U	0.0018 U
Chloroethane	14000	57000	0.0051 U	0.0046 U
Chloroform	32	140	0.002 U	0.0018 U
Chloromethane	110	460	0.0051 U	0.0046 U
cis-1,2-Dichloroethene	160	2300	0.002 U	0.0018 U
cis-1,3-Dichloropropene	NA	NA	0.002 U	0.0018 U
Cyclohexane	6500	27000	0.002 U	0.0018 U
Dibromochloromethane	830	3900	0.002 U	0.0018 U
Dichlorodifluoromethane	87	370	0.0051 U	0.0046 U
Ethylbenzene	580	2500	0.002 U	0.0018 U
Isopropylbenzene	1900	9900	0.002 U	0.0018 U
Methyl acetate	78000	1200000	0.025 U	0.023 U
Methyl Ethyl Ketone	27000	190000	0.0051 U	0.0099 J
methyl isobutyl ketone	33000	140000	0.0051 U	0.0046 U
Methyl tert-butyl ether	4700	21000	0.002 U	0.0018 U
Methylcyclohexane	NA	NA	0.002 U	0.0018 U
Methylene Chloride	350	3200	0.0051 U	0.0046 U
Styrene	6000	35000	0.002 U	0.0018 U
Tetrachloroethene	81	390	0.002 U	0.0018 U
Toluene	4900	47000	0.002 U	0.0018 U
trans-1,2-Dichloroethene	1600	23000	0.002 U	0.0018 U
trans-1,3-Dichloropropene	NA	NA	0.002 U	0.0018 U
Trichloroethene	4.1	19	0.002 U	0.0018 U
Trichlorofluoromethane	23000	350000	0.0051 U	0.0046 U
Vinyl chloride	5.9	170	0.002 U	0.0018 U
Xylenes, Total	580	2500	0.0016 J	0.0037 U
1,1'-Biphenyl	47	200	1.8 U	1.8 U
2,2'-oxybis[1-chloropropane]	3100	47000	1.8 U	1.8 U
2,4,5-Trichlorophenol	6300	82000	3.5 U	3.5 U
2,4,6-Trichlorophenol	63	820	3.5 U	3.5 U
2,4-Dichlorophenol	190	2500	3.5 U	3.5 U
2,4-Dimethylphenol	1300	16000	3.5 U	3.5 U
2,4-Dinitrophenol	130	1600	7.1 U	7.2 U
2,4-Dinitrotoluene	130	740	1.8 U	1.8 U
2,6-Dinitrotoluene	19	150	1.8 U	1.8 U
2-Chloronaphthalene	4800	60000	1.8 U	1.8 U
2-Chlorophenol	390	5800	1.8 U	1.8 U
2-Methylnaphthalene	240	3000	0.71 U	0.72 U
2-Methylphenol	3200	41000	1.8 U	1.8 U
2-Nitroaniline	630	8000	1.8 U	1.8 U
2-Nitrophenol	NA	NA	3.5 U	3.5 U
3 & 4 Methylphenol	NA	NA	1.8 U	1.8 U
3,3'-Dichlorobenzidine	120	510	1.8 U	1.8 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-10C-20190809	JCF-SOIL-11-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	3.5 U	3.5 U
4,6-Dinitro-2-methylphenol	5.1	66	7.1 U	7.2 U
4-Bromophenyl phenyl ether	NA	NA	1.8 U	1.8 U
4-Chloro-3-methylphenol	6300	82000	3.5 U	3.5 U
4-Chloroaniline	250	1100	7.1 U	7.2 U
4-Chlorophenyl phenyl ether	NA	NA	1.8 U	1.8 U
4-Nitroaniline	250	3300	3.5 U	3.5 U
4-Nitrophenol	NA	NA	7.1 U	7.2 U
Acenaphthene	3600	45000	0.35 U	0.35 U
Acenaphthylene	NA	NA	0.35 U	0.35 U
Acetophenone	7800	120000	3.5 U	3.5 U
Anthracene	18000	230000	0.35 U	0.35 U
Atrazine	240	1000	3.5 U	3.5 U
Benzaldehyde	7800	82000	14 UJ	14 UJ
Benzo[a]anthracene	110	2100	0.34 J	0.093 J
Benzo[a]pyrene	11	210	0.43	0.12 J
Benzo[b]fluoranthene	110	2100	0.87	0.2 J
Benzo[g,h,i]perylene	NA	NA	0.23 J	0.35 U
Benzo[k]fluoranthene	1100	21000	0.21 J	0.35 U
Bis(2-chloroethoxy)methane	190	2500	1.8 U	1.8 U
Bis(2-chloroethyl)ether	23	100	1.8 U	1.8 U
Bis(2-ethylhexyl) phthalate	1300	16000	1.8 U	1.8 U
Butyl benzyl phthalate	13000	120000	1.8 U	1.8 U
Caprolactam	31000	400000	3.5 UJ	3.5 UJ
Carbazole	NA	NA	1.8 U	1.8 U
Chrysene	11000	210000	0.57	0.16 J
Dibenz(a,h)anthracene	11	210	0.35 U	0.35 U
Dibenzofuran	73	1000	1.8 U	1.8 U
Diethyl phthalate	51000	660000	1.8 U	1.8 U
Dimethyl phthalate	NA	NA	1.8 U	1.8 U
Di-n-butyl phthalate	6300	82000	1.8 U	1.8 U
Di-n-octyl phthalate	630	8200	1.8 U	1.8 U
Fluoranthene	2400	30000	0.8	0.18 J
Fluorene	2400	30000	0.35 U	0.35 U
Hexachlorobenzene	21	96	0.71 U	0.72 U
Hexachlorobutadiene	78	530	1.8 U	1.8 U
Hexachlorocyclopentadiene	1.8	7.5	7.1 U	7.2 U
Hexachloroethane	45	460	1.8 U	1.8 U
Indeno[1,2,3-cd]pyrene	110	2100	0.25 J	0.35 U
Isophorone	13000	160000	1.8 U	1.8 U
Naphthalene	130	590	0.35 U	0.35 U
Nitrobenzene	130	1300	0.35 U	0.35 U
N-Nitrosodi-n-propylamine	7.8	33	0.71 U	0.72 U
N-Nitrosodiphenylamine	11000	47000	1.8 U	1.8 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil	RMLs: Industrial Soil	JCF-SOIL-10C-20190809	JCF-SOIL-11-20190809
Matrix	Cancer Risk 10^{-4}	Cancer Risk 10^{-4}	Soil	Soil
Date	THQ = 1	THQ = 1	8/9/2019	8/9/2019
Analyte	(mg/kg)	(mg/kg)	mg/kg	mg/kg
Pentachlorophenol	100	400	7.1 U	7.2 U
Phenanthrene	NA	NA	0.27 J	0.12 J
Phenol	19000	250000	1.8 U	1.8 U
Pyrene	1800	23000	0.85	0.28 J
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	92 NJ	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	--
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	0.016 NJ	0.0056 NJ
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	--	11 NJ
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	--	2.8 NJ
3-Penten-2-one, 4-methyl-	NA	NA	--	6.1 NJ
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	7.1 NJ
Cyclohexane	NA	NA	2.1 NJ	--
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	1.3 NJ	4.8 NJ
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	6.1 NJ	--
Naphthalene	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil	RMLs: Industrial Soil	JCF-SOIL-10C-20190809	JCF-SOIL-11-20190809
Matrix	Cancer Risk 10^{-4}	Cancer Risk 10^{-4}	Soil	Soil
Date	THQ = 1	THQ = 1	8/9/2019	8/9/2019
Analyte	(mg/kg)	(mg/kg)	mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	--
Naphthalene, decahydro-, trans-	NA	NA	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	9.1 NJ	--
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	7.9 NJ
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-11-20190809-D	JCF-SOIL-12-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Aluminum	77000	1100000	13000	12000
Antimony	31	470	2 U	1.9 UJ
Arsenic	35	300	11	9.3
Barium	15000	220000	160	120 J
Beryllium	160	2300	0.69	0.58
Cadmium	71	980	0.55 J+	0.46 J+
Calcium	NA	NA	7300	11000 J
Chromium	NA	NA	18	16
Cobalt	23	350	17	11
Copper	3100	47000	21	18
Iron	55000	820000	22000	19000 J
Lead	400	800	28	23
Magnesium	NA	NA	5100	7200 J
Manganese	1800	26000	1300	810 J
Nickel	1500	22000	26	19
Potassium	NA	NA	2000	1900 J+
Selenium	390	5800	1.6	1.3 J-
Silver	390	5800	3.6	3.3
Sodium	NA	NA	590	470
Thallium	0.78	12	0.67 J	0.56 J
Vanadium	390	5800	34	29 J
Zinc	23000	350000	100	100
Mercury	11	46	0.026	0.023
1,1,1-Trichloroethane	8100	36000	0.0019 U	0.0018 U
1,1,2,2-Tetrachloroethane	60	270	0.0019 U	0.0018 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.0019 U	0.0018 U
1,1,2-Trichloroethane	1.5	6.3	0.0019 U	0.0018 U
1,1-Dichloroethane	360	1600	0.0019 U	0.0018 U
1,1-Dichloroethene	230	1000	0.0019 U	0.0018 U
1,2,4-Trichlorobenzene	58	260	0.0019 U	0.0018 UJ
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.0047 U	0.0045 UJ
1,2-Dibromoethane	3.6	16	0.0019 U	0.0018 U
1,2-Dichlorobenzene	1800	9300	0.0019 U	0.0018 UJ
1,2-Dichloroethane	31	140	0.0047 U	0.0045 U
1,2-Dichloropropane	16	66	0.0019 U	0.0018 UJ
1,3-Dichlorobenzene	NA	NA	0.0019 U	0.0018 UJ
1,4-Dichlorobenzene	260	1100	0.0019 U	0.0018 UJ
2-Hexanone	200	1300	0.0047 U	0.0045 U
Acetone	61000	670000	0.045	0.018 U
Benzene	82	420	0.0019 U	0.0018 U
Bromodichloromethane	29	130	0.0019 U	0.0018 U
Bromoform	1600	8600	0.0019 U	0.0018 U
Bromomethane	6.8	30	0.0047 U	0.0045 U
Carbon disulfide	770	3500	0.0047 U	0.0045 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-11-20190809-D	JCF-SOIL-12-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Carbon tetrachloride	65	290	0.0019 U	0.0018 UJ
Chlorobenzene	280	1300	0.0019 U	0.0018 U
Chloroethane	14000	57000	0.0047 U	0.0045 U
Chloroform	32	140	0.0019 U	0.0018 U
Chloromethane	110	460	0.0047 U	0.0045 U
cis-1,2-Dichloroethene	160	2300	0.0019 U	0.0018 U
cis-1,3-Dichloropropene	NA	NA	0.0019 U	0.0018 UJ
Cyclohexane	6500	27000	0.0019 U	0.0018 UJ
Dibromochloromethane	830	3900	0.0019 U	0.0018 U
Dichlorodifluoromethane	87	370	0.0047 U	0.0045 UJ
Ethylbenzene	580	2500	0.0019 U	0.0018 UJ
Isopropylbenzene	1900	9900	0.0019 U	0.0018 UJ
Methyl acetate	78000	1200000	0.024 U	0.022 U
Methyl Ethyl Ketone	27000	190000	0.0047 UJ	0.0045 U
methyl isobutyl ketone	33000	140000	0.0047 U	0.0045 U
Methyl tert-butyl ether	4700	21000	0.0019 U	0.0018 U
Methylcyclohexane	NA	NA	0.0019 U	0.0018 UJ
Methylene Chloride	350	3200	0.0047 U	0.0045 U
Styrene	6000	35000	0.0019 U	0.0018 UJ
Tetrachloroethene	81	390	0.0019 U	0.0018 UJ
Toluene	4900	47000	0.0019 U	0.0018 UJ
trans-1,2-Dichloroethene	1600	23000	0.0019 U	0.0018 U
trans-1,3-Dichloropropene	NA	NA	0.0019 U	0.0018 UJ
Trichloroethene	4.1	19	0.0019 U	0.0018 U
Trichlorofluoromethane	23000	350000	0.0047 U	0.0045 U
Vinyl chloride	5.9	170	0.0019 U	0.0018 U
Xylenes, Total	580	2500	0.0038 U	0.0036 U
1,1'-Biphenyl	47	200	1.7 U	1.7 U
2,2'-oxybis[1-chloropropane]	3100	47000	1.7 U	1.7 UJ
2,4,5-Trichlorophenol	6300	82000	3.4 U	3.4 U
2,4,6-Trichlorophenol	63	820	3.4 U	3.4 UJ
2,4-Dichlorophenol	190	2500	3.4 U	3.4 U
2,4-Dimethylphenol	1300	16000	3.4 U	3.4 UJ
2,4-Dinitrophenol	130	1600	7 U	6.9 U
2,4-Dinitrotoluene	130	740	1.7 U	1.7 U
2,6-Dinitrotoluene	19	150	1.7 U	1.7 U
2-Chloronaphthalene	4800	60000	1.7 U	1.7 U
2-Chlorophenol	390	5800	1.7 U	1.7 U
2-Methylnaphthalene	240	3000	0.7 U	0.69 U
2-Methylphenol	3200	41000	1.7 U	1.7 U
2-Nitroaniline	630	8000	1.7 U	1.7 U
2-Nitrophenol	NA	NA	3.4 U	3.4 U
3 & 4 Methylphenol	NA	NA	1.7 U	1.7 U
3,3'-Dichlorobenzidine	120	510	1.7 U	1.7 UJ

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-11-20190809-D	JCF-SOIL-12-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
3-Nitroaniline	NA	NA	3.4 U	3.4 U
4,6-Dinitro-2-methylphenol	5.1	66	7 U	6.9 UJ
4-Bromophenyl phenyl ether	NA	NA	1.7 U	1.7 U
4-Chloro-3-methylphenol	6300	82000	3.4 U	3.4 UJ
4-Chloroaniline	250	1100	7 U	6.9 UJ
4-Chlorophenyl phenyl ether	NA	NA	1.7 U	1.7 U
4-Nitroaniline	250	3300	3.4 U	3.4 UJ
4-Nitrophenol	NA	NA	7 U	6.9 UJ
Acenaphthene	3600	45000	0.34 U	0.34 U
Acenaphthylene	NA	NA	0.34 U	0.34 U
Acetophenone	7800	120000	3.4 U	3.4 U
Anthracene	18000	230000	0.34 U	0.34 U
Atrazine	240	1000	3.4 U	3.4 U
Benzaldehyde	7800	82000	14 UJ	14 UJ
Benzo[a]anthracene	110	2100	0.34 U	0.12 J
Benzo[a]pyrene	11	210	0.34 UJ	0.17 J
Benzo[b]fluoranthene	110	2100	0.34 UJ	0.37
Benzo[g,h,i]perylene	NA	NA	0.34 UJ	0.34 UJ
Benzo[k]fluoranthene	1100	21000	0.34 UJ	0.16 J
Bis(2-chloroethoxy)methane	190	2500	1.7 U	1.7 U
Bis(2-chloroethyl)ether	23	100	1.7 U	1.7 U
Bis(2-ethylhexyl) phthalate	1300	16000	1.7 U	1.7 U
Butyl benzyl phthalate	13000	120000	1.7 U	1.7 U
Caprolactam	31000	400000	3.4 UJ	3.4 UJ
Carbazole	NA	NA	1.7 U	1.7 U
Chrysene	11000	210000	0.34 UJ	0.25 J
Dibenz(a,h)anthracene	11	210	0.34 UJ	0.34 UJ
Dibenzofuran	73	1000	1.7 U	1.7 U
Diethyl phthalate	51000	660000	1.7 U	1.7 U
Dimethyl phthalate	NA	NA	1.7 U	1.7 U
Di-n-butyl phthalate	6300	82000	1.7 U	1.7 U
Di-n-octyl phthalate	630	8200	1.7 UJ	1.7 U
Fluoranthene	2400	30000	0.19 J	0.28 J
Fluorene	2400	30000	0.34 U	0.34 U
Hexachlorobenzene	21	96	0.7 U	0.69 U
Hexachlorobutadiene	78	530	1.7 U	1.7 U
Hexachlorocyclopentadiene	1.8	7.5	7 U	6.9 UJ
Hexachloroethane	45	460	1.7 U	1.7 U
Indeno[1,2,3-cd]pyrene	110	2100	0.34 UJ	0.34 U
Isophorone	13000	160000	1.7 U	1.7 U
Naphthalene	130	590	0.34 U	0.34 U
Nitrobenzene	130	1300	0.34 U	0.34 U
N-Nitrosodi-n-propylamine	7.8	33	0.7 U	0.69 U
N-Nitrosodiphenylamine	11000	47000	1.7 U	1.7 U

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-SOIL-11-20190809-D	JCF-SOIL-12-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Pentachlorophenol	100	400	7 U	6.9 UJ
Phenanthrene	NA	NA	0.16 J	0.093 J
Phenol	19000	250000	1.7 U	1.7 U
Pyrene	1800	23000	0.33 J	0.32 J
1,2,4-Trimethylbenzene	NA	NA	--	--
1,2-Benzisothiazol-3(2H)-one	NA	NA	--	30 NJ
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	--
1-Decanol	NA	NA	--	--
1-Decene	NA	NA	--	--
1-Hexadecene	NA	NA	--	--
1-Octanol	NA	NA	0.0073 NJ	--
1-Undecanol	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	18 NJ	--
2,8,9-Trioxa-5-aza-1-silabicyclo[3.3.3]undecane, 1-methyl-	NA	NA	--	--
2H-1,4-Benzodiazepin-2-one, 9-chloro-1,3-dihydro-5-phenyl-	NA	NA	--	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	4.7 NJ	--
3-Penten-2-one, 4-methyl-	NA	NA	5.7 NJ	--
Azulene	NA	NA	--	--
Benzene, (2-chloro-2-butenyl)-	NA	NA	--	--
Benzene, 1-(1-methylethenyl)-3-(1-methylethyl)-	NA	NA	--	--
Benzene, 1,2,3,4-tetramethyl-	NA	NA	--	--
Benzene, 1,2,3,5-tetramethyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	--
cis,cis-1,10-Dimethylspiro[4.5]decane	NA	NA	--	--
Cyclodecane	NA	NA	--	--
Cyclohexane	NA	NA	--	2.1 NJ
Cyclopropane, 1-butyl-2-pentyl-, cis-	NA	NA	--	--
Cyclotetradecane, 1,7,11-trimethyl-4-(1-methylethyl)-	NA	NA	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--
Decane	NA	NA	--	--
Decane, 4-methyl-	NA	NA	--	--
D-Limonene	NA	NA	--	--
Dodecane	NA	NA	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Hexadecanoic acid	NA	NA	5.1 NJ	1.3 NJ
Hexanoic acid, 2-ethyl-	NA	NA	--	--
Metolachlor	NA	NA	--	--
Naphthalene	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,1,6-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5-dimethyl-	NA	NA	--	--

Table 1 - Emergency Response Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	**RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)**	JCF-SOIL-11-20190809-D	JCF-SOIL-12-20190809
Matrix			Soil	Soil
Date			8/9/2019	8/9/2019
Analyte			mg/kg	mg/kg
Naphthalene, 1,2,3,4-tetrahydro-1,6,8-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	--
Naphthalene, decahydro-, trans-	NA	NA	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octanoic Acid	NA	NA	--	11 NJ
Octanoic acid, methyl ester	NA	NA	--	--
Phosphoric acid tributyl ester	NA	NA	--	2.2 NJ
trans-3,4,4-Trimethyl-2-pentene	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
RML = Removal Management Level
mg/kg = Milligram per Kilogram
TQH = Target Hazard Quotients
NA = Not Applicable
-- = Tentatively identfied analyte not identifed in sample

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
Aluminum	60	NA	1.1 J	2 U	0.14 J
Antimony	0.023	0.006	0.13 J	0.2 U	0.02 U
Arsenic	0.0052	0.01	0.051 J	0.1 U	0.0051 J
Barium	11	2	0.29	0.077 J	0.044
Beryllium	0.074	0.004	0.04 U	0.04 U	0.004 U
Cadmium	0.028	0.005	0.022	0.0051 J	0.002 U
Calcium	NA	NA	150	68	50
Chromium	NA	0.1	0.036 J	0.1 U	0.01 U
Cobalt	0.018	NA	0.26	0.011 J	0.011
Copper	2.4	1.3	0.41	0.061 J	0.034 J+
Iron	42	NA	18	1.8 J	0.53 J+
Lead	0.015	0.015	0.25	0.05 U	0.0081
Magnesium	NA	NA	17	47	39
Manganese	1.3	NA	6.3	0.41	0.4
Nickel	1.2	NA	0.16	0.021 J	0.038 J
Potassium	NA	NA	73	3.8 J	3.7
Selenium	0.3	0.05	0.17 J	0.1 U	0.016
Silver	0.28	NA	0.05 U	0.05 U	0.005 U
Sodium	NA	NA	1500	110	110
Thallium	0.0006	0.002	0.1 U	0.1 U	0.01 U
Vanadium	0.26	NA	0.072	0.05 U	0.0017 J
Zinc	18	NA	4.6	0.4 J	0.094 J
Mercury	0.0019	0.002	0.005 UJ	0.0005 U	0.00033 U
1,1,1-Trichloroethane	24	0.2	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.0076	NA	0.001 U	0.001 U	0.001 U
1,1,2-Trichloro-1,2,2-trifluoroethane	31	NA	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	0.0012	0.005	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	0.28	NA	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	0.85	0.007	0.05 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	0.012	0.07	0.05 UJ	0.001 U	0.001 U
1,2-Dibromo-3-Chloropropane	0.000033	0.0002	0.001 U	0.005 U	0.005 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
1,2-Dibromoethane	0.00075	0.00005	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	0.91	0.6	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	0.017	0.005	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	0.025	0.005	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	NA	NA	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	0.048	0.075	0.001 U	0.001 U	0.001 U
2-Hexanone	0.11	NA	0.005 U	0.005 U	0.005 U
Acetone	42	NA	0.26	0.21	0.21
Benzene	0.046	0.005	0.031 J+	0.0065	0.0069
Bromodichloromethane	0.013	NA	0.001 U	0.001 U	0.001 U
Bromoform	0.33	NA	0.001 U	0.001 U	0.001 U
Bromomethane	0.023	NA	0.003 U	0.003 U	0.003 U
Carbon disulfide	2.4	NA	0.0027 J	0.00093 J	0.002 U
Carbon tetrachloride	0.046	0.005	0.001 U	0.001 U	0.001 U
Chlorobenzene	0.23	0.1	0.001 U	0.001 U	0.001 U
Chloroethane	63	NA	0.001 U	0.001 U	0.001 U
Chloroform	0.022	NA	0.0025 J+	0.002 U	0.002 U
Chloromethane	0.56	NA	0.00077 J+	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.11	0.07	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	NA	NA	0.001 UJ	0.001 U	0.001 U
Cyclohexane	38	NA	0.001 U	0.001 U	0.001 U
Dibromochloromethane	0.087	NA	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	0.59	NA	0.003 U	0.003 U	0.003 U
Ethylbenzene	0.15	0.7	0.0054 J+	0.0022	0.0018
Isopropylbenzene	1.4	NA	0.00057 J+	0.001 U	0.001 U
Methyl acetate	60	NA	0.005 U	0.005 U	0.005 U
Methyl Ethyl Ketone	17	NA	0.084 J+	0.014 J	0.005 UJ
methyl isobutyl ketone	19	NA	0.005 U	0.005 U	0.005 U
Methyl tert-butyl ether	1.4	NA	0.001 U	0.001 U	0.001 U
Methylcyclohexane	NA	NA	0.001 UJ	0.001 U	0.001 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
Methylene Chloride	0.32	0.005	0.005 U	0.005 U	0.005 U
Styrene	3.6	0.1	0.0057 J+	0.0011	0.00086 J
Tetrachloroethene	0.12	0.005	0.029 J+	0.0038	0.003
Toluene	3.3	1	0.0076 J+	0.002	0.002
trans-1,2-Dichloroethene	1.1	0.1	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	NA	NA	0.001 UJ	0.001 U	0.001 U
Trichloroethene	0.0085	0.005	0.0005 U	0.0005 U	0.0005 U
Trichlorofluoromethane	15	NA	0.001 U	0.001 U	0.001 U
Vinyl chloride	0.0019	0.002	0.001 U	0.001 U	0.001 U
Xylenes, Total	0.58	10	0.023 J+	0.0098	0.0075
1,1'-Biphenyl	0.0025	NA	1 U	1 U	1 U
2,2'-oxybis[1-chloropropane]	2.1	NA	0.4 U	0.4 U	0.4 U
2,4,5-Trichlorophenol	3.5	NA	2 U	2 U	2 U
2,4,6-Trichlorophenol	0.036	NA	1 U	1 U	1 U
2,4-Dichlorophenol	0.14	NA	2 U	2 U	2 U
2,4-Dimethylphenol	1.1	NA	2 U	2 U	2 U
2,4-Dinitrophenol	0.12	NA	4 U	4 U	4 U
2,4-Dinitrotoluene	0.024	NA	0.2 U	0.2 U	0.2 U
2,6-Dinitrotoluene	0.0049	NA	0.2 U	0.2 U	0.2 U
2-Chloronaphthalene	2.2	NA	0.4 U	0.4 U	0.4 U
2-Chlorophenol	0.27	NA	1 U	1 U	1 U
2-Methylnaphthalene	0.11	NA	0.4 U	0.4 U	0.4 U
2-Methylphenol	2.8	NA	0.4 U	0.4 U	0.4 U
2-Nitroaniline	0.57	NA	1 U	1 U	1 U
2-Nitrophenol	NA	NA	2 U	2 U	2 U
3 & 4 Methylphenol	NA	NA	0.4 U	0.4 U	0.4 U
3,3'-Dichlorobenzidine	0.013	NA	1 U	1 U	1 U
3-Nitroaniline	NA	NA	2 U	2 U	2 U
4,6-Dinitro-2-methylphenol	0.0045	NA	4 UJ	4 UJ	4 UJ
4-Bromophenyl phenyl ether	NA	NA	1 U	1 U	1 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
4-Chloro-3-methylphenol	4.3	NA	2 U	2 U	2 U
4-Chloroaniline	0.037	NA	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	NA	NA	1 U	1 U	1 U
4-Nitroaniline	0.23	NA	2 U	2 U	2 U
4-Nitrophenol	NA	NA	4 U	4 U	4 U
Acenaphthene	1.6	NA	0.2 U	0.2 U	0.2 U
Acenaphthylene	NA	NA	0.2 U	0.28 U	0.2 U
Acetophenone	5.8	NA	1 U	1 U	1 U
Anthracene	5.3	NA	0.2 U	0.1 J	0.2 U
Atrazine	0.03	0.003	1 U	1 U	1 U
Benzaldehyde	1.9	NA	8 UJ	8 UJ	8 UJ
Benzo[a]anthracene	0.003	NA	0.04 U	0.04 U	0.04 U
Benzo[a]pyrene	0.0025	0.0002	0.04 U	0.04 U	0.04 U
Benzo[b]fluoranthene	0.025	NA	0.04 U	0.04 U	0.04 U
Benzo[g,h,i]perylene	NA	NA	0.2 U	0.2 U	0.2 U
Benzo[k]fluoranthene	0.25	NA	0.04 U	0.04 U	0.04 U
Bis(2-chloroethoxy)methane	0.18	NA	0.4 U	0.4 U	0.4 U
Bis(2-chloroethyl)ether	0.0014	NA	0.4 U	0.4 U	0.4 U
Bis(2-ethylhexyl) phthalate	0.56	0.006	2 U	1.1 J	2 U
Butyl benzyl phthalate	1.6	NA	0.4 U	0.4 U	0.4 U
Caprolactam	30	NA	2 U	2 U	2 U
Carbazole	NA	NA	1 U	1 U	1 U
Chrysene	2.5	NA	0.04 U	0.04 U	0.04 U
Dibenz(a,h)anthracene	0.0025	NA	0.06 U	0.06 U	0.06 U
Dibenzofuran	0.024	NA	0.4 U	0.4 U	0.4 U
Diethyl phthalate	45	NA	1 U	1 U	1 U
Dimethyl phthalate	NA	NA	1 U	1 U	1 U
Di-n-butyl phthalate	2.7	NA	1 U	1 U	1 U
Di-n-octyl phthalate	0.6	NA	2 U	2 U	2 U
Fluoranthene	2.4	NA	0.2 U	0.19 J	0.2 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
Fluorene	0.88	NA	0.2 U	0.2 U	0.2 U
Hexachlorobenzene	0.00098	0.001	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	0.014	NA	1 U	1 U	1 U
Hexachlorocyclopentadiene	0.0012	0.05	4 U	4 U	4 U
Hexachloroethane	0.019	NA	1 U	1 U	1 U
Indeno[1,2,3-cd]pyrene	0.025	NA	0.04 U	0.04 U	0.04 U
Isophorone	7.8	NA	0.4 U	0.4 U	0.4 U
Naphthalene	0.017	NA	0.2 U	0.27	0.2 U
Nitrobenzene	0.014	NA	0.2 U	0.2 U	0.2 U
N-Nitrosodi-n-propylamine	0.0011	NA	0.1 U	0.1 U	0.1 U
N-Nitrosodiphenylamine	1.2	NA	0.4 U	0.4 U	0.4 U
Pentachlorophenol	0.0041	0.001	4 U	4 U	4 U
Phenanthrene	NA	NA	0.2 U	0.42 J	0.2 UJ
Phenol	17	NA	1 U	1 U	1 U
Pyrene	0.36	NA	0.2 U	0.17 J	0.2 U
1,2,4-Trimethylbenzene	NA	NA	--	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	0.66 NJ	--
1-Decene	NA	NA	16 NJ	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--	--
1H-Indene, 5-butyl-6-hexyloctahydro-	NA	NA	--	--	--
1-Octadecene	NA	NA	--	--	0.52 NJ
1-Octanol	NA	NA	--	--	0.0096 NJ
1-Pentene, 2,4,4-trimethyl-	NA	NA	6.8 NJ	39 NJ	0.078 NJ
2-Pentene, 2,4,4-trimethyl-	NA	NA	--	11 NJ	--
7-Hexadecyne	NA	NA	8 NJ	--	--
9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	NA	NA	210 NJ	--	--
Acetaldehyde	NA	NA	0.0072 NJ	--	--
Azulene	NA	NA	0.015 NJ	--	--
Benzene, (3-methyl-2-butenyl)-	NA	NA	0.0069 NJ	--	--

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L
Benzene, 1-(2-butenyl)-2,3-dimethyl-	NA	NA	--	--	--
Benzene, 1,2-diethyl-	NA	NA	0.0079 NJ	--	--
Benzene, 1,3,5-trimethyl-	NA	NA	0.0073 NJ	--	--
Benzene, 1-ethyl-2-methyl-	NA	NA	--	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	0.0064 NJ	--
Benzene, 4-ethyl-1,2-dimethyl-	NA	NA	--	--	--
Benzeneacetonitrile, .alpha.-phenyl-	NA	NA	--	--	--
Cyclohexane	NA	NA	--	--	--
Cyclooctane	NA	NA	--	--	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	--	--	--
D-Limonene	NA	NA	0.0097 NJ	--	--
Ethanol	NA	NA	0.0065 NJ	--	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--	--
Isopropyl Alcohol	NA	NA	--	0.0063 NJ	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,6-dimethyl-4-(1-methylethy	NA	NA	--	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	0.012 NJ	0.014 NJ	0.0083 NJ
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	0.01 NJ	--	--
Naphthalene, decahydro-2-methyl-	NA	NA	0.0068 NJ	0.0058 NJ	--
Octadecanoic acid	NA	NA	7.4 NJ	--	--
Octanal	NA	NA	--	--	--
Oleic Acid	NA	NA	--	--	14 NJ
Pentadecanoic acid	NA	NA	7.6 NJ	--	--
Pyridine, 1,2,3,6-tetrahydro-4-[4,5-dihydroxyphenyl]-1-methy	NA	NA	--	--	0.89 NJ
trans-3,4,4-Trimethyl-2-pentene	NA	NA	0.055 NJ	0.0057 NJ	0.007 NJ
Tridecane	NA	NA	0.0062 NJ	--	--
Undecane	NA	NA		--	0.0065 NJ

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level, yellow colored results indiate both screening levels were exceeded.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-04-20190808	JCF-WATER-08-20190808	JCF-WATER-08-20190808-D
Matrix			Water	Water	Water
Date			8/8/2019	8/8/2019	8/8/2019
Analyte			mg/L	mg/L	mg/L

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

RML = Removal Management Level

mg/L = Milligram per Liter

mg/kg = Milligram per Kilogram

THQ = Target Hazard Quotients

NA = Not Applicable

-- = Tentatively identfied analyte not identifed in sample

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
Aluminum	60	NA	0.78 J	0.35 J
Antimony	0.023	0.006	0.04 U	0.04 U
Arsenic	0.0052	0.01	0.0088 J	0.02 U
Barium	11	2	0.082 J	0.027 J
Beryllium	0.074	0.004	0.008 U	0.008 U
Cadmium	0.028	0.005	0.004 U	0.004 U
Calcium	NA	NA	56 J-	30 J
Chromium	NA	0.1	0.005 J	0.02 U
Cobalt	0.018	NA	0.011	0.0086 J
Copper	2.4	1.3	0.06 J	0.029 J
Iron	42	NA	3.1 J-	0.96 J
Lead	0.015	0.015	0.014	0.01 U
Magnesium	NA	NA	45 J-	36
Manganese	1.3	NA	0.27	0.18
Nickel	1.2	NA	0.036	0.03
Potassium	NA	NA	5.1	4.3
Selenium	0.3	0.05	0.02 U	0.02 U
Silver	0.28	NA	0.0038 J	0.0042 J
Sodium	NA	NA	120	110
Thallium	0.0006	0.002	0.02 U	0.02 U
Vanadium	0.26	NA	0.0049 J	0.0025 J
Zinc	18	NA	0.54 J-	0.11 J
Mercury	0.0019	0.002	0.0005 UJ	0.0005 U
1,1,1-Trichloroethane	24	0.2	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.0076	NA	0.001 U	0.001 U
1,1,2-Trichloro-1,2,2-trifluoroethane	31	NA	0.001 U	0.001 U
1,1,2-Trichloroethane	0.0012	0.005	0.001 U	0.001 U
1,1-Dichloroethane	0.28	NA	0.001 U	0.001 U
1,1-Dichloroethene	0.85	0.007	0.001 U	0.001 U
1,2,4-Trichlorobenzene	0.012	0.07	0.001 U	0.001 U
1,2-Dibromo-3-Chloropropane	0.000033	0.0002	0.005 U	0.005 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
1,2-Dibromoethane	0.00075	0.00005	0.001 U	0.001 U
1,2-Dichlorobenzene	0.91	0.6	0.001 U	0.001 U
1,2-Dichloroethane	0.017	0.005	0.001 U	0.001 U
1,2-Dichloropropane	0.025	0.005	0.001 U	0.001 U
1,3-Dichlorobenzene	NA	NA	0.001 U	0.001 U
1,4-Dichlorobenzene	0.048	0.075	0.001 U	0.001 U
2-Hexanone	0.11	NA	0.005 U	0.005 U
Acetone	42	NA	0.12	0.13
Benzene	0.046	0.005	0.00093	0.0011
Bromodichloromethane	0.013	NA	0.001 U	0.001 U
Bromoform	0.33	NA	0.001 U	0.001 U
Bromomethane	0.023	NA	0.003 U	0.003 U
Carbon disulfide	2.4	NA	0.00051 J	0.00056 J
Carbon tetrachloride	0.046	0.005	0.001 U	0.001 U
Chlorobenzene	0.23	0.1	0.001 U	0.001 U
Chloroethane	63	NA	0.001 U	0.001 U
Chloroform	0.022	NA	0.002 U	0.002 U
Chloromethane	0.56	NA	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.11	0.07	0.001 U	0.001 U
cis-1,3-Dichloropropene	NA	NA	0.001 U	0.001 U
Cyclohexane	38	NA	0.001 U	0.001 U
Dibromochloromethane	0.087	NA	0.001 U	0.001 U
Dichlorodifluoromethane	0.59	NA	0.003 U	0.003 U
Ethylbenzene	0.15	0.7	0.00089	0.0014
Isopropylbenzene	1.4	NA	0.001 U	0.001 U
Methyl acetate	60	NA	0.005 U	0.005 U
Methyl Ethyl Ketone	17	NA	0.0071	0.005 U
methyl isobutyl ketone	19	NA	0.005 U	0.005 U
Methyl tert-butyl ether	1.4	NA	0.001 U	0.001 U
Methylcyclohexane	NA	NA	0.001 U	0.001 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
Methylene Chloride	0.32	0.005	0.005 U	0.005 U
Styrene	3.6	0.1	0.001 U	0.0006 J
Tetrachloroethene	0.12	0.005	0.0015	0.0025
Toluene	3.3	1	0.00062	0.00081
trans-1,2-Dichloroethene	1.1	0.1	0.001 U	0.001 U
trans-1,3-Dichloropropene	NA	NA	0.001 U	0.001 U
Trichloroethene	0.0085	0.005	0.0005 U	0.0005 U
Trichlorofluoromethane	15	NA	0.001 U	0.001 U
Vinyl chloride	0.0019	0.002	0.001 U	0.001 U
Xylenes, Total	0.58	10	0.0043	0.0064
1,1'-Biphenyl	0.0025	NA	0.039 U	0.04 U
2,2'-oxybis[1-chloropropane]	2.1	NA	0.016 U	0.016 U
2,4,5-Trichlorophenol	3.5	NA	0.078 UJ	0.079 U
2,4,6-Trichlorophenol	0.036	NA	0.039 U	0.04 U
2,4-Dichlorophenol	0.14	NA	0.078 UJ	0.079 U
2,4-Dimethylphenol	1.1	NA	0.078 UJ	0.079 U
2,4-Dinitrophenol	0.12	NA	0.16 UJ	0.16 U
2,4-Dinitrotoluene	0.024	NA	0.0078 U	0.0079 U
2,6-Dinitrotoluene	0.0049	NA	0.0078 U	0.0079 U
2-Chloronaphthalene	2.2	NA	0.016 U	0.016 U
2-Chlorophenol	0.27	NA	0.039 UJ	0.04 U
2-Methylnaphthalene	0.11	NA	0.002 J	0.016 U
2-Methylphenol	2.8	NA	0.016 UJ	0.016 U
2-Nitroaniline	0.57	NA	0.039 UJ	0.04 U
2-Nitrophenol	NA	NA	0.078 UJ	0.079 U
3 & 4 Methylphenol	NA	NA	0.016 UJ	0.016 U
3,3'-Dichlorobenzidine	0.013	NA	0.039 UJ	0.04 U
3-Nitroaniline	NA	NA	0.078 U	0.079 U
4,6-Dinitro-2-methylphenol	0.0045	NA	0.16 UJ	0.16 U
4-Bromophenyl phenyl ether	NA	NA	0.039 U	0.04 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
4-Chloro-3-methylphenol	4.3	NA	0.078 UJ	0.079 U
4-Chloroaniline	0.037	NA	0.078 UJ	0.079 U
4-Chlorophenyl phenyl ether	NA	NA	0.039 U	0.04 U
4-Nitroaniline	0.23	NA	0.078 UJ	0.079 U
4-Nitrophenol	NA	NA	0.16 UJ	0.16 U
Acenaphthene	1.6	NA	0.0078 U	0.0079 U
Acenaphthylene	NA	NA	0.0078 U	0.0079 U
Acetophenone	5.8	NA	0.039 U	0.04 U
Anthracene	5.3	NA	0.0078 U	0.0079 U
Atrazine	0.03	0.003	0.039 UJ	0.04 U
Benzaldehyde	1.9	NA	0.31 UJ	0.32 UJ
Benzo[a]anthracene	0.003	NA	0.0016 U	0.0016 U
Benzo[a]pyrene	0.0025	0.0002	0.0016 U	0.0016 U
Benzo[b]fluoranthene	0.025	NA	0.0016 U	0.0016 U
Benzo[g,h,i]perylene	NA	NA	0.0078 UJ	0.0079 U
Benzo[k]fluoranthene	0.25	NA	0.0016 U	0.0016 U
Bis(2-chloroethoxy)methane	0.18	NA	0.016 UJ	0.016 U
Bis(2-chloroethyl)ether	0.0014	NA	0.016 U	0.016 U
Bis(2-ethylhexyl) phthalate	0.56	0.006	0.016 J	0.018 J
Butyl benzyl phthalate	1.6	NA	0.016 U	0.016 U
Caprolactam	30	NA	0.078 UJ	0.079 UJ
Carbazole	NA	NA	0.039 U	0.04 U
Chrysene	2.5	NA	0.0016 U	0.0016 U
Dibenz(a,h)anthracene	0.0025	NA	0.0023 UJ	0.0024 U
Dibenzofuran	0.024	NA	0.016 U	0.016 U
Diethyl phthalate	45	NA	0.039 U	0.04 U
Dimethyl phthalate	NA	NA	0.039 U	0.04 U
Di-n-butyl phthalate	2.7	NA	0.039 U	0.04 U
Di-n-octyl phthalate	0.6	NA	0.078 UJ	0.079 U
Fluoranthene	2.4	NA	0.0078 U	0.0079 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
Fluorene	0.88	NA	0.0078 U	0.0079 U
Hexachlorobenzene	0.00098	0.001	0.0039 U	0.004 U
Hexachlorobutadiene	0.014	NA	0.039 U	0.04 U
Hexachlorocyclopentadiene	0.0012	0.05	0.16 UJ	0.16 U
Hexachloroethane	0.019	NA	0.039 U	0.04 U
Indeno[1,2,3-cd]pyrene	0.025	NA	0.0016 U	0.0016 U
Isophorone	7.8	NA	0.016 UJ	0.016 U
Naphthalene	0.017	NA	0.0071 J-	0.0049 J
Nitrobenzene	0.014	NA	0.0078 UJ	0.0079 U
N-Nitrosodi-n-propylamine	0.0011	NA	0.0039 U	0.004 U
N-Nitrosodiphenylamine	1.2	NA	0.016 U	0.016 U
Pentachlorophenol	0.0041	0.001	0.16 U	0.16 U
Phenanthrene	NA	NA	0.013	0.012
Phenol	17	NA	0.039 UJ	0.04 U
Pyrene	0.36	NA	0.011 J+	0.0079 U
1,2,4-Trimethylbenzene	NA	NA	--	--
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	--	0.5 NJ
1-Decene	NA	NA	--	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	--	--
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	--	--
1H-Indene, 5-butyl-6-hexyloctahydro-	NA	NA	--	--
1-Octadecene	NA	NA	--	--
1-Octanol	NA	NA	0.0086 NJ	0.011 NJ
1-Pentene, 2,4,4-trimethyl-	NA	NA	2.6 NJ	--
2-Pentene, 2,4,4-trimethyl-	NA	NA	--	--
7-Hexadecyne	NA	NA	--	--
9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	NA	NA	--	--
Acetaldehyde	NA	NA	--	--
Azulene	NA	NA	--	--
Benzene, (3-methyl-2-butenyl)-	NA	NA	--	--

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)**	**MCL (mg/L)**	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L
Benzene, 1-(2-butenyl)-2,3-dimethyl-	NA	NA	--	--
Benzene, 1,2-diethyl-	NA	NA	--	--
Benzene, 1,3,5-trimethyl-	NA	NA	--	--
Benzene, 1-ethyl-2-methyl-	NA	NA	--	--
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--	0.46 NJ
Benzene, 4-ethyl-1,2-dimethyl-	NA	NA	--	--
Benzeneacetonitrile, .alpha.-phenyl-	NA	NA	--	3.6 NJ
Cyclohexane	NA	NA	0.056 NJ	--
Cyclooctane	NA	NA	--	2.7 NJ
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	0.13 NJ	2.8 NJ
D-Limonene	NA	NA	--	--
Ethanol	NA	NA	--	35 NJ
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--	--
Isopropyl Alcohol	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-1,6-dimethyl-4-(1-methylethy	NA	NA	--	--
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	0.0089 NJ	0.0084 NJ
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	--	0.0055 NJ
Naphthalene, decahydro-2-methyl-	NA	NA	--	--
Octadecanoic acid	NA	NA	--	--
Octanal	NA	NA	--	0.0053 NJ
Oleic Acid	NA	NA	--	--
Pentadecanoic acid	NA	NA	--	--
Pyridine, 1,2,3,6-tetrahydro-4-[4,5-dihydroxyphenyl]-1-methy	NA	NA	--	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	0.44 NJ	0.37 NJ
Tridecane	NA	NA	--	--
Undecane	NA	NA	--	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level, yellow colored results indiate both screening levels were exceeded.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Tapwater Cancer Risk 10^{-4} THQ = 3 (mg/L)	MCL (mg/L)	JCF-WATER-09-20190809	JCF-WATER-09-20190809-D
Matrix			Water	Water
Date			8/9/2019	8/9/2019
Analyte			mg/L	mg/L

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

RML = Removal Management Level

mg/L = Milligram per Liter

mg/kg = Milligram per Kilogram

THQ = Target Hazard Quotients

NA = Not Applicable

-- = Tentatively identfied analyte not identifed in sample

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg
Aluminum	77000	1100000	19 U
Antimony	31	470	1.9 U
Arsenic	35	300	0.97 U
Barium	15000	220000	0.97 U
Beryllium	160	2300	0.39 U
Cadmium	71	980	0.19 U
Calcium	NA	NA	28 J+
Chromium	NA	NA	0.97 U
Cobalt	23	350	0.49 U
Copper	3100	47000	0.97 U
Iron	55000	820000	19 U
Lead	400	800	0.49 U
Magnesium	NA	NA	9.7 U
Manganese	1800	26000	0.37 J
Nickel	1500	22000	0.97 U
Potassium	NA	NA	49 U
Selenium	390	5800	0.97 U
Silver	390	5800	0.49 U
Sodium	NA	NA	97 U
Thallium	0.78	12	0.97 U
Vanadium	390	5800	0.49 U
Zinc	23000	350000	4 J+
Mercury	11	46	0.016 U
1,1,1-Trichloroethane	8100	36000	0.05 U
1,1,2,2-Tetrachloroethane	60	270	0.05 U
1,1,2-Trichloro-1,2,2-trifluoroethane	6700	28000	0.05 U
1,1,2-Trichloroethane	1.5	6.3	0.001 U
1,1-Dichloroethane	360	1600	0.05 U
1,1-Dichloroethene	230	1000	0.05 U
1,2,4-Trichlorobenzene	58	260	0.05 U
1,2-Dibromo-3-Chloropropane	0.53	6.4	0.25 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg
1,2-Dibromoethane	3.6	16	0.05 U
1,2-Dichlorobenzene	1800	9300	0.05 U
1,2-Dichloroethane	31	140	0.05 U
1,2-Dichloropropane	16	66	0.05 U
1,3-Dichlorobenzene	NA	NA	0.05 U
1,4-Dichlorobenzene	260	1100	0.05 U
2-Hexanone	200	1300	0.25 U
Acetone	61000	670000	0.5 U
Benzene	82	420	0.16
Bromodichloromethane	29	130	0.001 U
Bromoform	1600	8600	0.05 U
Bromomethane	6.8	30	0.15 U
Carbon disulfide	770	3500	0.1 U
Carbon tetrachloride	65	290	0.05 U
Chlorobenzene	280	1300	0.05 U
Chloroethane	14000	57000	0.05 U
Chloroform	32	140	0.1 U
Chloromethane	110	460	0.05 U
cis-1,2-Dichloroethene	160	2300	0.05 U
cis-1,3-Dichloropropene	NA	NA	0.05 U
Cyclohexane	6500	27000	0.05 U
Dibromochloromethane	830	3900	0.05 U
Dichlorodifluoromethane	87	370	0.15 U
Ethylbenzene	580	2500	0.11
Isopropylbenzene	1900	9900	0.03 J
Methyl acetate	78000	1200000	0.25 U
Methyl Ethyl Ketone	27000	190000	0.25 U
methyl isobutyl ketone	33000	140000	0.25 U
Methyl tert-butyl ether	4700	21000	0.05 U
Methylcyclohexane	NA	NA	0.05 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg
Methylene Chloride	350	3200	0.25 U
Styrene	6000	35000	0.69
Tetrachloroethene	81	390	0.029 J
Toluene	4900	47000	0.91
trans-1,2-Dichloroethene	1600	23000	0.05 U
trans-1,3-Dichloropropene	NA	NA	0.05 U
Trichloroethene	4.1	19	0.025 U
Trichlorofluoromethane	23000	350000	0.05 U
Vinyl chloride	5.9	170	0.05 U
Xylenes, Total	580	2500	0.18
1,1'-Biphenyl	47	200	21 U
2,2'-oxybis[1-chloropropane]	3100	47000	21 U
2,4,5-Trichlorophenol	6300	82000	42 U
2,4,6-Trichlorophenol	63	820	42 U
2,4-Dichlorophenol	190	2500	42 U
2,4-Dimethylphenol	1300	16000	42 U
2,4-Dinitrophenol	130	1600	86 U
2,4-Dinitrotoluene	130	740	21 U
2,6-Dinitrotoluene	19	150	21 U
2-Chloronaphthalene	4800	60000	21 U
2-Chlorophenol	390	5800	21 U
2-Methylnaphthalene	240	3000	1.8 J
2-Methylphenol	3200	41000	21 U
2-Nitroaniline	630	8000	21 U
2-Nitrophenol	NA	NA	42 U
3 & 4 Methylphenol	NA	NA	21 U
3,3'-Dichlorobenzidine	120	510	21 U
3-Nitroaniline	NA	NA	42 U
4,6-Dinitro-2-methylphenol	5.1	66	86 U
4-Bromophenyl phenyl ether	NA	NA	21 U

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg
4-Chloro-3-methylphenol	6300	82000	42 U
4-Chloroaniline	250	1100	86 U
4-Chlorophenyl phenyl ether	NA	NA	21 U
4-Nitroaniline	250	3300	42 U
4-Nitrophenol	NA	NA	86 U
Acenaphthene	3600	45000	4.2 U
Acenaphthylene	NA	NA	4 J
Acetophenone	7800	120000	42 U
Anthracene	18000	230000	1.2 J
Atrazine	240	1000	42 U
Benzaldehyde	7800	82000	170 U
Benzo[a]anthracene	110	2100	4.2 U
Benzo[a]pyrene	11	210	4.2 U
Benzo[b]fluoranthene	110	2100	4.2 U
Benzo[g,h,i]perylene	NA	NA	4.2 U
Benzo[k]fluoranthene	1100	21000	4.2 U
Bis(2-chloroethoxy)methane	190	2500	21 U
Bis(2-chloroethyl)ether	23	100	21 U
Bis(2-ethylhexyl) phthalate	1300	16000	21 U
Butyl benzyl phthalate	13000	120000	21 U
Caprolactam	31000	400000	42 U
Carbazole	NA	NA	21 U
Chrysene	11000	210000	4.2 U
Dibenz(a,h)anthracene	11	210	4.2 U
Dibenzofuran	73	1000	21 U
Diethyl phthalate	51000	660000	21 U
Dimethyl phthalate	NA	NA	21 U
Di-n-butyl phthalate	6300	82000	21 U
Di-n-octyl phthalate	630	8200	21 U
Fluoranthene	2400	30000	1.6 J

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil	RMLs: Industrial Soil	JCF-WATER-07-20190808
Matrix	**Cancer Risk 10^{-4}**	**Cancer Risk 10^{-4}**	Waste
Date	**THQ = 1**	**THQ = 1**	8/8/2019
Analyte	**(mg/kg)**	**(mg/kg)**	mg/kg
Fluorene	2400	30000	4.2 U
Hexachlorobenzene	21	96	8.6 U
Hexachlorobutadiene	78	530	21 U
Hexachlorocyclopentadiene	1.8	7.5	86 U
Hexachloroethane	45	460	21 U
Indeno[1,2,3-cd]pyrene	110	2100	4.2 U
Isophorone	13000	160000	21 U
Naphthalene	130	590	5.7
Nitrobenzene	130	1300	4.2 U
N-Nitrosodi-n-propylamine	7.8	33	8.6 U
N-Nitrosodiphenylamine	11000	47000	21 U
Pentachlorophenol	100	400	86 U
Phenanthrene	NA	NA	4.2
Phenol	19000	250000	21 U
Pyrene	1800	23000	3.6 J
1,2,4-Trimethylbenzene	NA	NA	0.53 NJ
1,4-Dimethyl-1,2,3,4-tetrahydronaphthalene	NA	NA	17 NJ
1-Decene	NA	NA	--
1H-Inden-1-one, 2,3-dihydro-3,4,7-trimethyl-	NA	NA	0.57 NJ
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	NA	NA	0.53 NJ
1H-Indene, 5-butyl-6-hexyloctahydro-	NA	NA	19 NJ
1-Octadecene	NA	NA	--
1-Octanol	NA	NA	--
1-Pentene, 2,4,4-trimethyl-	NA	NA	0.77 NJ
2-Pentene, 2,4,4-trimethyl-	NA	NA	--
7-Hexadecyne	NA	NA	--
9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	NA	NA	--
Acetaldehyde	NA	NA	--
Azulene	NA	NA	0.84 NJ
Benzene, (3-methyl-2-butenyl)-	NA	NA	--

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg
Benzene, 1-(2-butenyl)-2,3-dimethyl-	NA	NA	11 NJ
Benzene, 1,2-diethyl-	NA	NA	--
Benzene, 1,3,5-trimethyl-	NA	NA	--
Benzene, 1-ethyl-2-methyl-	NA	NA	0.54 NJ
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E)-	NA	NA	--
Benzene, 4-ethyl-1,2-dimethyl-	NA	NA	0.44 NJ
Benzeneacetonitrile, .alpha.-phenyl-	NA	NA	--
Cyclohexane	NA	NA	--
Cyclooctane	NA	NA	--
Decahydro-4,4,8,9,10-pentamethylnaphthalene	NA	NA	63 NJ
D-Limonene	NA	NA	0.59 NJ
Ethanol	NA	NA	--
Ethanol, 2-(2-butoxyethoxy)-	NA	NA	--
Isopropyl Alcohol	NA	NA	--
Naphthalene, 1,2,3,4-tetrahydro-1,5,7-trimethyl-	NA	NA	48 NJ
Naphthalene, 1,2,3,4-tetrahydro-1,6-dimethyl-4-(1-methylethy	NA	NA	18 NJ
Naphthalene, 1,2,3,4-tetrahydro-2,7-dimethyl-	NA	NA	1.2 NJ
Naphthalene, 1,2,3,4-tetrahydro-6-methyl-	NA	NA	0.8 NJ
Naphthalene, decahydro-2-methyl-	NA	NA	--
Octadecanoic acid	NA	NA	--
Octanal	NA	NA	--
Oleic Acid	NA	NA	--
Pentadecanoic acid	NA	NA	--
Pyridine, 1,2,3,6-tetrahydro-4-[4,5-dihydroxyphenyl]-1-methy	NA	NA	--
trans-3,4,4-Trimethyl-2-pentene	NA	NA	12 NJ
Tridecane	NA	NA	--
Undecane	NA	NA	--

Notes:
Highlighted sample results indicate an exceedance corresponding to the associated screening level, yellow colored results indiate both screening levels were exceeded.
J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

Table 2 - Emergency Response Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	RMLs: Industrial Soil Cancer Risk 10^{-4} THQ = 1 (mg/kg)	JCF-WATER-07-20190808
Matrix			Waste
Date			8/8/2019
Analyte			mg/kg

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

NJ = The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value is the approximate concentration of the analyte in the sample.

R = The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

RML = Removal Management Level

mg/L = Milligram per Liter

mg/kg = Milligram per Kilogram

THQ = Target Hazard Quotients

NA = Not Applicable

-- = Tentatively identfied analyte not identifed in sample

Table 3 - Emergency Response Air Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Residential Air Cancer Risk 10^{-6} THQ = 1 ($\mu g/m^3$)	RSLs: Industrial Air Cancer Risk 10^{-6} THQ = 1 ($\mu g/m^3$)	JCF-AIR-PR-20190813	JCF-AIR-FR-20190813
Matrix			Air	Air
Date			8/13/2019	8/13/2019
Sample Time			1331 minutes (1405*)	1344 minutes (1411*)
Analyte			$\mu g/m^3$	$\mu g/m^3$
Formaldehyde	0.22	0.94	70	950
Dimethylamine	NA	NA	11 U	11 U
Ethylamine	NA	NA	11 U	11 U
Trimethylamine	NA	NA	11 U	11 U
Isopropylamine	NA	NA	11 U	11 U
tert-Butylamine	NA	NA	11 U	11 U
n-Propylamine	NA	NA	11 U	11 U
Diethylamine	NA	NA	11 U	11 U
sec-Butylamine	NA	NA	11 U	11 U
Isobutylamine	NA	NA	11 U	11 U
n-Butylamine	NA	NA	11 U	11 U
Diisopropylamine	NA	NA	11 U	11 U
Triethylamine	7.3	31	11 U	11 U
Dipropylamine	NA	NA	11 U	11 U

Notes:

Highlighted sample results indicate an exceedance corresponding to the associated screening level, yellow colored results indiate both screening levels were exceeded.

* Indicates sample time for formaldehyde analyte.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

RSL = Regional Screening Level

$\mu g/m^3$ = Micrograms per cubic meter

THQ = Target Hazard Quotient

NA = Not Applicable

Table 4 - MultiRAE Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Instrument	Analyte	Period Average Exceedances	Number of Readings	Concentration Range	Period Average
10/23/2019	MultiRAE Pro 05-RAE 014	VOC	No	49	0 to 140 ppb	<1 ppb
		O2	No	49	20.7 to 20.9%	20.9%
		CO	No	49	0 to 0 ppm	0 ppm
		LEL	No	49	0 to 0%	0%
		H2S	No	49	0 to 0 ppm	0 ppm
10/23/2019	MultiRAE Pro 05-RAE 014	VOC	No	14	0 to 0 ppb	0 ppb
		O2	No	14	20.9 to 20.9%	20.9%
		CO	No	14	0 to 0 ppm	0 ppm
		LEL	No	14	0 to 0%	0%
		H2S	No	14	0 to 0 ppm	0 ppm
10/23/2019	MultiRAE Pro 05-RAE 014	VOC	No	26	0 to 70 ppb	2 ppb
		O2	No	26	20.9 to 20.9%	20.9%
		CO	No	26	0 to 0 ppm	0 ppm
		LEL	No	26	0 to 0%	0%
		H2S	No	26	0 to 0 ppm	0 ppm
10/24/2019	MultiRAE Pro 05-RAE 014	VOC	No	21	0 to 0 ppb	0 ppb
		O2	No	21	20.9 to 20.9%	20.9%
		CO	No	21	0 to 0 ppm	0 ppm
		LEL	No	21	0 to 0%	0%
		H2S	No	21	0 to 0 ppm	0 ppm
10/28/2019	MultiRAE Pro 05-RAE 014	VOC	No	55	0 to 20.9 ppm	220 ppb
		O2	No	55	20.9 to 20.9%	20.9%
		CO	No	55	0 to 0 ppm	0 ppm
		LEL	No	55	0 to 0%	0%
		H2S	No	55	0 to 0 ppm	0 ppm
10/28/2019	MultiRAE Pro 05-RAE 014	VOC	No	12	0 to 0 ppb	0 ppb
		O2	No	12	20.9 to 21.1%	20.9%
		CO	No	12	0 to 0 ppm	0 ppm
		LEL	No	12	0 to 0%	0%
		H2S	No	12	0 to 0 ppm	0 ppm

Notes:
CO - Carbon Dioxide
H2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
O2 - Oxygen
ppb - Parts per Billion
ppm - Parts per Million
VOC - Volatile Organic Compounds

Table 4 - MultiRAE Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Instrument	Analyte	Period Average Exceedances	Number of Readings	Concentration Range	Period Average
10/28/2019	MultiRAE Pro 05-RAE 014	VOC	No	51	0 to 6340 ppb	30 ppb
		O2	No	51	20.9 to 20.9%	20.9%
		CO	No	51	0 to 0 ppm	0 ppm
		LEL	No	51	0 to 0%	0%
		H2S	No	51	0 to 0 ppm	0 ppm
11/4/2019	MultiRAE Pro 05-RAE 014	VOC	No	162	0 to 170 ppb	3 ppb
		O2	No	162	20.9 to 20.9%	20.9%
		CO	No	162	0 to 9 ppm	<1 ppm
		LEL	No	162	0 to 0%	0%
		H2S	No	162	0 to 0 ppm	0 ppm
11/5/2019	MultiRAE Pro 05-RAE 014	VOC	No	78	0 to 50 ppb	<1 ppb
		O2	No	78	20.9 to 20.9%	20.9%
		CO	No	78	0 to 15 ppm	<1 ppm
		LEL	No	78	0 to 0%	0%
		H2S	No	78	0 to 0 ppm	0 ppm
11/5/2019	MultiRAE Pro 05-RAE 014	VOC	No	197	0 to 5590 ppb	80 ppb
		O2	No	197	20.9 to 20.9%	20.9%
		CO	No	197	0 to 24 ppm	<1 ppm
		LEL	No	197	0 to 0%	0%
		H2S	No	197	0 to 0 ppm	0 ppm
11/5/2019	MultiRAE Pro 05-RAE 014	VOC	No	28	0 to 0 ppb	0 ppb
		O2	No	28	20.9 to 21.1%	21.0%
		CO	No	28	0 to 0 ppm	0 ppm
		LEL	No	28	0 to 0%	0%
		H2S	No	28	0 to 0 ppm	0 ppm
11/6/2019	MultiRAE Pro 05-RAE 014	VOC	No	28	0 to 3910 ppb	10 ppb
		O2	No	28	20.9 to 21.4%	21.0%
		CO	No	28	0 to 0 ppm	0 ppm
		LEL	No	28	0 to 0%	0%
		H2S	No	28	0 to 0 ppm	0 ppm

Notes:
CO - Carbon Dioxide
H2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
O2 - Oxygen
ppb - Parts per Billion
ppm - Parts per Million
VOC - Volatile Organic Compounds

Table 4 - MultiRAE Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Instrument	Analyte	Period Average Exceedances	Number of Readings	Concentration Range	Period Average
11/7/2019	MultiRAE Pro 05-RAE 014	VOC	Yes	2	0.2 to 89.5 ppm	4200 ppb
		O2	No	2	20.9 to 20.9%	20.9%
		CO	No	2	5 to 24 ppm	8 ppm
		LEL	No	2	0 to 0%	0%
		H2S	No	2	0 to 0 ppm	0 ppm
11/7/2019	MultiRAE Pro 05-RAE 014	VOC	No	175	0 to 880 ppb	140 ppb
		O2	No	175	20.9 to 20.9%	20.9%
		CO	No	175	0 to 6 ppm	2 ppm
		LEL	No	175	0 to 0%	0%
		H2S	No	175	0 to 0 ppm	0 ppm
11/7/2019	MultiRAE Pro 05-RAE 014	VOC	No	8	0 to 0 ppb	0 ppb
		O2	No	8	20.9 to 20.9%	20.9%
		CO	No	8	0 to 0 ppm	0 ppm
		LEL	No	8	0 to 0%	0%
		H2S	No	8	0 to 0 ppm	0 ppm
11/8/2019	MultiRAE Pro 05-RAE 014	VOC	Yes	200	0 to 170.8 ppm	1180 ppb
		O2	No	200	20.9 to 20.9%	20.9%
		CO	No	200	0 to 0 ppm	0 ppm
		LEL	No	200	0 to 0%	0%
		H2S	No	200	0 to 0 ppm	0 ppm
11/11/2019	MultiRAE Pro 05-RAE 014	VOC	No	3	0 to 20 ppb	0 ppb
		O2	No	3	20.9 to 20.9%	20.90%
		CO	No	3	0 to 0 ppm	0 ppm
		LEL	No	3	0 to 0%	0%
		H2S	No	3	0 to 0 ppm	0 ppm
11/11/2019	MultiRAE Pro 05-RAE 014	VOC	Yes	2	160 to 40.1 ppm	1660 ppb
		O2	No	2	20.9 to 20.9%	20.9%
		CO	No	2	4 to 20 ppm	5 ppm
		LEL	No	2	0 to 0%	0%
		H2S	No	2	0 to 0 ppm	0 ppm

Notes:
CO - Carbon Dioxide
H2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
O2 - Oxygen
ppb - Parts per Billion
ppm - Parts per Million
VOC - Volatile Organic Compounds

Table 4 - MultiRAE Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Instrument	Analyte	Period Average Exceedances	Number of Readings	Concentration Range	Period Average
11/11/2019	MultiRAE Pro 05-RAE 014	VOC	No	371	0 to 1050 ppb	20 ppb
		O2	No	371	20.9 to 21.3%	20.9%
		CO	No	371	0 to 3 ppm	<1 ppm
		LEL	No	371	0 to 0%	0%
		H2S	No	371	0 to 0 ppm	0 ppm
11/12/2019	MultiRAE Pro 05-RAE 014	VOC	No	275	0 to 800 ppb	100 ppb
		O2	No	275	20.9 to 20.9%	20.9%
		CO	No	275	0 to 0 ppm	0 ppm
		LEL	No	275	0 to 0%	0%
		H2S	No	275	0 to 0 ppm	0 ppm
11/13/2019	MultiRAE Pro 05-RAE 014	VOC	No	441	0 to 510 ppb	40 ppb
		O2	No	441	20.9 to 21.3%	20.9%
		CO	No	441	0 to 0 ppm	0 ppm
		LEL	No	441	0 to 0%	0%
		H2S	No	441	0 to 0.9 ppm	0 ppm
11/14/2019	MultiRAE Pro 05-RAE 014	VOC	No	271	0 to 1050 ppb	60 ppb
		O2	No	271	20.9 to 21.3%	20.9%
		CO	No	271	0 to 0 ppm	0 ppm
		LEL	No	271	0 to 0%	0%
		H2S	No	271	0 to 0 ppm	0 ppm
11/18/2019	MultiRAE Pro 05-RAE 014	VOC	No	148	0 to 100 ppm	90 ppb
		O2	No	148	20.9 to 21.3%	20.9%
		CO	No	148	0 to 21 ppm	<1 ppm
		LEL	No	148	0 to 0%	0%
		H2S	No	148	0 to 0 ppm	0 ppm
11/18/2019	MultiRAE Pro 05-RAE 014	VOC	No	103	0 to 1020 ppb	230 ppb
		O2	No	103	20.5 to 21.1%	20.9%
		CO	No	103	0 to 7 ppm	1 ppm
		LEL	No	103	0 to 0%	0%
		H2S	No	103	0 to 0 ppm	0 ppm

Notes:
CO - Carbon Dioxide
H2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
O2 - Oxygen
ppb - Parts per Billion
ppm - Parts per Million
VOC - Volatile Organic Compounds

Table 4 - MultiRAE Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Instrument	Analyte	Period Average Exceedances	Number of Readings	Concentration Range	Period Average
11/19/2019	MultiRAE Pro 05-RAE 014	VOC	No	103	0 to 1020 ppb	230 ppb
		O2	No	103	20.5 to 21.1%	20.9%
		CO	No	103	0 to 7 ppm	1 ppm
		LEL	No	103	0 to 0%	0%
		H2S	No	103	0 to 0 ppm	0 ppm
11/25/2019	MultiRAE Pro 05-RAE 014	VOC	No	62	0 to 0 ppb	0 ppb
		O2	No	62	20.9 to 20.9%	20.9%
		CO	No	62	0 to 0 ppm	0 ppm
		LEL	No	62	0 to 0%	0%
		H2S	No	62	0 to 0 ppm	0 ppm
11/25/2019	MultiRAE Pro 05-RAE 014	VOC	No	10	0 to 0 ppb	0 ppb
		O2	No	10	20.9 to 20.9%	20.9%
		CO	No	10	0 to 0 ppm	0 ppm
		LEL	No	10	0 to 0%	0%
		H2S	No	10	0 to 0 ppm	0 ppm
11/25/2019	MultiRAE Pro 05-RAE 014	VOC	No	36	0 to 880 ppb	10 ppb
		O2	No	36	20.9 to 20.9%	20.9%
		CO	No	36	0 to 0 ppm	0 ppm
		LEL	No	36	0 to 0%	0%
		H2S	No	36	0 to 0 ppm	0 ppm

Notes:
CO - Carbon Dioxide
H2S - Hydrogen Sulfide
LEL - Lower Explosive Limit
O2 - Oxygen
ppb - Parts per Billion
ppm - Parts per Million
VOC - Volatile Organic Compounds

Table 5 - Particulate Air Monitoring Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Monitoring Period Start Time	Monitoring Period Stop Time	Concentration (mg/m^3)										Action Level Exceedance Length (Minutes)
			PM1		PM2.5		PM4		PM10		Total PM		
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
10/28/2019	8:58 AM	1:09 PM	0.021	0.56	0.021	0.572	0.022	0.575	0.025	0.594	0.025	2.08	0
10/28/2019	2:03 PM	2:23 PM	0.018	0.25	0.019	0.25	0.019	0.252	0.02	0.271	0.02	0.554	0
11/4/2019	8:54 AM	12:14 PM	0.008	0.971	0.009	0.989	0.009	1.05	0.01	2.11	0.01	9.88	2
11/5/2019	9:05 AM	3:35 PM	0.002	2.57	0.002	2.57	0.003	2.58	0.003	2.85	0.003	7.45	<1
11/6/2019	9:34 AM	3:42 PM	0	0.825	0	0.826	0	0.831	0.002	0.949	0.003	2.42	0
11/7/2019	11:49 AM	3:32 PM	0.002	0.115	0.002	0.117	0.003	0.122	0.004	0.218	0.004	2.45	0
11/11/2019	8:05 AM	2:11 PM	-0.301*	16.1	0.001	16.4	0.001	17.5	0.002	21.8	0.002	22.4	<1
11/12/2019	8:59 AM	12:35 PM	0	0.787	0	0.81	0	0.89	0.002	1.77	0.002	9.69	<1
11/13/2019	8:07 AM	3:15 PM	0	0.404	0	0.407	0	0.421	0	0.641	0	7.06	<1
11/14/2019	8:41 AM	1:14 PM	-0.01*	1.98	0.008	1.99	0.008	1.99	0.009	2.12	0.009	9.74	<1
11/18/2019	7:36 AM	1:27 PM	0.011	1.29	0.012	1.29	0.012	1.29	0.013	1.4	0.013	3.73	<1
11/20/2019	7:39 AM	2:53 PM	0.01	1.77	0.011	1.9	0.011	2.4	0.012	7.32	0.013	20.9	18
11/25/2019	7:55 AM	3:17 PM	0.005	1.95	0.006	2	0.006	2.18	0.006	4.39	0.006	19.9	<1

Notes:

mg/m^3	milligrams per cubic meter
Max	Maxiumum
Min	Minimum
PM1	Particulate matter with an aerodynamic diameter less than 1 micron
PM2.5	Particulate matter with an aerodynamic diameter less than 2.5 microns
PM4	Particulate matter with an aerodynamic diameter less than 4 microns
PM10	Particulate matter with an aerodynamic diameter less than 10 microns
Total PM	Particulate matter with an aerodynamic diameter up to 100 microns
PM	Particulate Matter
2.5	Concentration is above the site action level for particulate matter of 2.5 mg/m^3
*	Negative value due to instrument drift

Table 6 - Affected Property #3 Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	MPGI-I80-Soil-01-110819	MPGI-I80-Soil-02-110819	MPGI-I80-Soil-03-110819	MPGI-I80-Soil-04-110819	MPGI-I80-Soil-05-110819	MPGI-I80-Soil-06-111519
Matrix		Soil	Soil	Soil	Soil	Soil	Soil
Date		11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/8/2019	11/15/2019
Analyte		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TPH-DRO	6000	9.2	12	6.3 J	7.3	18	1600 J

Notes:

DRO = Diesel range organics

IEPA = Illinois Environmental Protection Agency

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

mg/kg = Milligram per kilogram

MPGI = MPG Industries

TACO = Tiered approach to corrective action objectives

TPH = Total petroleum hydrocarbons

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 7 - Residential Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-13A-121719	MPGI-SF-Soil-13B-121719
Matrix			Soil	Soil
Date			12/17/2019	12/17/2019
Analyte			mg/kg	mg/kg
TPH-DRO	6000	NA	8.3 J-	5 J-
Mercury	NA	33	0.036 J	0.052 J
Aluminum	NA	230000	19000	19000
Antimony	NA	94	0.41 J	0.35 J
Arsenic	NA	68	12	12
Barium	NA	46000	110	120
Beryllium	NA	470	0.8	0.85
Cadmium	NA	210	0.32 U	0.091 J
Calcium	NA	NA	7600	8200
Chromium	NA	NA	23	26
Cobalt	NA	70	10	9.3
Copper	NA	9400	21	25
Iron	NA	160000	23000	22000
Lead	NA	400	22	27
Magnesium	NA	NA	6300	6000
Manganese	NA	5500	550	500
Nickel	NA	4600	22	21
Potassium	NA	NA	3300	3600
Selenium	NA	1200	0.55 J	0.51 J
Silver	NA	1200	0.64 U	0.61 U
Sodium	NA	NA	320 U	300 U
Thallium	NA	2.3	3.2 U	3 U
Vanadium	NA	1200	39	40
Zinc	NA	70000	74	82

Notes:

DRO = Diesel range organics

IEPA = Illinois Environmental Protection Agency

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J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

mg/kg = Milligram per kilogram

MPGI = MPG Industries

NA = Not applicable

RML = Regional management level

TACO = Tiered approach to corrective action objectives

THQ = Target hazard quotient

TPH = Total petroleum hydrocarbons

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 8 - Affected Property #1 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**TACO Screening Level (mg/kg)**	MPGI-PP-Soil-01-111819	MPGI-PP-Soil-02-111819
Matrix		Soil	Soil
Date		11/18/2019	11/18/2019
Analyte		mg/kg	mg/kg
TPH-DRO	6000	5.9 U	17

Notes:

DRO = Diesel range organics

IEPA = Illinois Environmental Protection Agency

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

mg/kg = Milligram per kilogram

MPGI = MPG Industries

TACO = Tiered approach to corrective action objectives

TPH = Total petroleum hydrocarbons

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 9 - Affected Property #2 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	MPGI-102219-01	MPGI-102219-01D	MPGI-102219-02	MPGI-102219-03
Matrix		Soil	Soil	Soil	Soil
Date		10/22/2019	10/22/2019	10/22/2019	10/22/2019
Analyte		mg/kg	mg/kg	mg/kg	mg/kg
TPH-DRO	6000	16	23	1900 J+	31

Notes:

DRO = Diesel range organics

IEPA = Illinois Environmental Protection Agency

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

mg/kg = Milligram per kilogram

TACO = Tiered approach to corrective action objectives

TPH = Total petroleum hydrocarbons

Table 10 - Site Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	MPGI-North-Soil-01-120419	MPGI-North-Soil-02-120419	MPGI-North-Soil-03-120419	MPGI-North-Soil-04-120419	MPGI-North-Soil-04-120419-D	MPGI-East-Soil-06-120419
Matrix		Soil	Soil	Soil	Soil	Soil	Soil
Date		12/4/2019	12/4/2019	12/4/2019	12/4/2019	12/4/2019	12/4/2019
Analyte		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TPH-DRO	6000	12	33	8.4 U	15	16	69 J-

Notes:
DRO = Diesel range organics
IEPA = Illinois Environmental Protection Agency

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
mg/kg - Milligram per kilogram
MPGI = MPG Industries
TACO = Tiered approach to corrective action objectives
TPH = Total petroleum hydrocarbons
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 10 - Site Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	MPGI-East-Soil-07-120419	MPGI-East-Soil-08-120419	MPGI-East-Soil-09-120419
Matrix		Soil	Soil	Soil
Date		12/4/2019	12/4/2019	12/4/2019
Analyte		mg/kg	mg/kg	mg/kg
TPH-DRO	6000	220	69	99

Notes:

DRO = Diesel range organics

IEPA = Illinois Environmental Protection Agency

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

mg/kg = Milligram per kilogram

MPGI = MPG Industries

TACO = Tiered approach to corrective action objectives

TPH = Total petroleum hydrocarbons

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

Table 11 - Affected Property #4 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-09-121719	MPGI-SF-Soil-10A-121719	MPGI-SF-Soil-10B-121719
Matrix			Soil	Soil	Soil
Date			12/17/2019	12/17/2019	12/17/2019
Analyte			mg/kg	mg/kg	mg/kg
TPH-DRO	6000	NA	41 J-	16	41
Mercury	NA	33	0.028 J	0.1 U	0.027 J
Aluminum	NA	230000	21000	18000	15000
Antimony	NA	94	1.2 UJ	1.2 U	1.1 U
Arsenic	NA	68	14	20	13
Barium	NA	46000	220	180	110
Beryllium	NA	470	0.98	1	0.78
Cadmium	NA	210	0.47	0.52 J	0.21 J-
Calcium	NA	NA	16000 J	3300	13000
Chromium	NA	NA	27	25	21
Cobalt	NA	70	15	18	14
Copper	NA	9400	26	29	21
Iron	NA	160000	26000	37000	24000
Lead	NA	400	27	28	22
Magnesium	NA	NA	11000	4200	9400
Manganese	NA	5500	1700 J	1900	940
Nickel	NA	4600	34	43	27
Potassium	NA	NA	3200 J+	3000	2700
Selenium	NA	1200	2.4 U	0.99 J	1.1 U
Silver	NA	1200	0.61 U	0.61 U	0.53 U
Sodium	NA	NA	130 J	140 J	130 J
Thallium	NA	2.3	8.99 U	6.1 U	5.64 U
Vanadium	NA	1200	46	46	36
Zinc	NA	70000	99	86	83

Notes:
DRO = Diesel range organics
IEPA = Illinois Environmental Protection Agency

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mg/kg = Milligram per kilogram
MPGI = MPG Industries
NA = Not applicable
RSL = Regional screening level
RML = Regional management level
TACO = Tiered approach to corrective action objectives
THQ = Target Hazard Quotient
TPH = Total petroleum hydrocarbons
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Table 11 - Affected Property #4 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-10C-121719	MPGI-SF-Soil-11A-121919	MPGI-SF-Soil-11B-121919
Matrix			Soil	Soil	Soil
Date			12/17/2019	12/19/2019	12/19/2019
Analyte			mg/kg	mg/kg	mg/kg
TPH-DRO	6000	NA	4.9 J	6.4 J	8.1 UJ
Mercury	NA	33	0.025 J	0.035 J	0.033 J
Aluminum	NA	230000	18000	20000	19000
Antimony	NA	94	0.28 J	1.1 U	1.1 U
Arsenic	NA	68	20	15	17
Barium	NA	46000	330	120	270
Beryllium	NA	470	1	0.91	0.9
Cadmium	NA	210	0.49 J	0.2 J-	0.52
Calcium	NA	NA	8500	6000	5400
Chromium	NA	NA	26	25	24
Cobalt	NA	70	21	6.6	17
Copper	NA	9400	28	20	21
Iron	NA	160000	35000	24000	26000
Lead	NA	400	35	23	27
Magnesium	NA	NA	6400	4300	4100
Manganese	NA	5500	2800	470	2200
Nickel	NA	4600	38	18	25
Potassium	NA	NA	3500	2700	2400
Selenium	NA	1200	4.4 U	0.6 J	3.4 U
Silver	NA	1200	0.17 J	0.57 U	0.56 U
Sodium	NA	NA	280 J	210 J	170 J
Thallium	NA	2.3	7.72 U	2.8 U	11.7 U
Vanadium	NA	1200	47	44	46
Zinc	NA	70000	130	76	80

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mg/kg = Milligram per kilogram
MPGI = MPG Industries
NA = Not applicable
RSL = Regional screening level
RML = Regional management level
TACO = Tiered approach to corrective action objectives
THQ = Target Hazard Quotient
TPH = Total petroleum hydrocarbons
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Table 11 - Affected Property #4 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-11C-121919	MPGI-SF-Soil-12A-121919	MPGI-SF-Soil-12B-121819
Matrix			Soil	Soil	Soil
Date			12/19/2019	12/19/2019	12/18/2019
Analyte			mg/kg	mg/kg	mg/kg
TPH-DRO	6000	NA	15	8.3 J	13
Mercury	NA	33	0.032 J	0.03 J	0.11 U
Aluminum	NA	230000	19000	19000	17000
Antimony	NA	94	1.3 U	0.33 J	1.2 U
Arsenic	NA	68	22	13	17
Barium	NA	46000	320	140	440
Beryllium	NA	470	0.95	0.91	0.89
Cadmium	NA	210	0.47 J-	0.3 J	0.73
Calcium	NA	NA	7300	8700	11000
Chromium	NA	NA	25	25	23
Cobalt	NA	70	16	9.7	42
Copper	NA	9400	24	25	23
Iron	NA	160000	35000	23000	28000
Lead	NA	400	30	26	31
Magnesium	NA	NA	5100	6000	7300
Manganese	NA	5500	1900	700	3900
Nickel	NA	4600	25	21	33
Potassium	NA	NA	2800	3200	2800
Selenium	NA	1200	3.8 U	0.62 J	6.1 U
Silver	NA	1200	0.63 U	0.66 U	0.35 J
Sodium	NA	NA	130 J	120 J+	150 J
Thallium	NA	2.3	9.5 U	3.34 U	21.27 U
Vanadium	NA	1200	49	43	47
Zinc	NA	70000	110	120	110

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NA = Not applicable
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Table 11 - Affected Property #4 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-12C-121919	MPGI-SF-Soil-14A-121919	MPGI-SF-Soil-14A-121919-D
Matrix			Soil	Soil	Soil
Date			12/19/2019	12/19/2019	12/19/2019
Analyte			mg/kg	mg/kg	mg/kg
TPH-DRO	6000	NA	12	8.3	10
Mercury	NA	33	0.095 U	0.034 J	0.033 J
Aluminum	NA	230000	14000	16000	14000
Antimony	NA	94	1.1 U	1.1 U	1.1 U
Arsenic	NA	68	10	7.4	8.1
Barium	NA	46000	110	96	98
Beryllium	NA	470	0.68	0.68	0.62
Cadmium	NA	210	0.19 J	0.12 J	0.18 J
Calcium	NA	NA	12000	5800	5200
Chromium	NA	NA	19	20	17
Cobalt	NA	70	7.1	6.5	7.8
Copper	NA	9400	19	16	15
Iron	NA	160000	18000	16000	16000
Lead	NA	400	20	17	18
Magnesium	NA	NA	7100	4200	3700
Manganese	NA	5500	580	390	620
Nickel	NA	4600	16	14	15
Potassium	NA	NA	2400	2100	1800
Selenium	NA	1200	0.44 J	1.1 U	1.1 U
Silver	NA	1200	0.53 U	0.57 U	0.55 U
Sodium	NA	NA	84 J	55 J	41 J
Thallium	NA	2.3	2.7 U	2.9 U	2.8 U
Vanadium	NA	1200	33	35	31
Zinc	NA	70000	87	71	66

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MPGI = MPG Industries
NA = Not applicable
RSL = Regional screening level
RML = Regional management level
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U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
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Table 11 - Affected Property #4 Confirmation Soil Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	IEPA TACO Screening Level (mg/kg)	RMLs: Residential Soil Cancer Risk 10^{-4} THQ = 3 (mg/kg)	MPGI-SF-Soil-14B-121919	MPGI-SF-Soil-14C-121919
Matrix			Soil	Soil
Date			12/19/2019	12/19/2019
Analyte			mg/kg	mg/kg
TPH-DRO	6000	NA	23	13
Mercury	NA	33	0.025 J	0.027 J
Aluminum	NA	230000	13000	12000
Antimony	NA	94	1.1 U	1.1 U
Arsenic	NA	68	9.5	10
Barium	NA	46000	93	110
Beryllium	NA	470	0.64	0.59
Cadmium	NA	210	0.16 J	0.22 J
Calcium	NA	NA	14000	12000
Chromium	NA	NA	17	16
Cobalt	NA	70	7.9	9.4
Copper	NA	9400	18	17
Iron	NA	160000	18000	19000
Lead	NA	400	19	20
Magnesium	NA	NA	8800	6500
Manganese	NA	5500	590	720
Nickel	NA	4600	17	17
Potassium	NA	NA	2100	2000
Selenium	NA	1200	1.1 U	1.1 U
Silver	NA	1200	0.55 U	0.57 U
Sodium	NA	NA	80 J	39 J
Thallium	NA	2.3	2.8 U	3.21 U
Vanadium	NA	1200	30	29
Zinc	NA	70000	99	81

Notes:
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J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
mg/kg = Milligram per kilogram
MPGI = MPG Industries
NA = Not applicable
RSL = Regional screening level
RML = Regional management level
TACO = Tiered approach to corrective action objectives
THQ = Target Hazard Quotient
TPH = Total petroleum hydrocarbons
U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)
UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-09-Water-RW-120319	MPGI-11-Water-RW-120319	MPGI-12-Water-RW-120319	MPGI-13-Water-RW-120319
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/3/2019	12/3/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	800	200	200	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	0.076	NA	NA	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	NA	NA	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	0.041	5	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	2.8	700	NA	1 U	1 U	1 U	1 U
1,1-Dichloroethene	28	7	7	1 UJ	1 UJ	1 UJ	1 UJ
1,2,4-Trichlorobenzene	0.4	70	70	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00033	0.2	0.2	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.05	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	30	600	600	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.17	5	5	1 U	1 U	1 U	1 U
1,2-Dichloropropane	0.82	5	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NA	NA	NA	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	0.48	75	75	1 U	1 U	1 U	1 U
2-Butanone (MEK)	560	NA	NA	10 U	10 U	10 U	10 U
2-Hexanone	3.8	NA	NA	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	630	NA	NA	10 U	10 U	10 U	10 U
Acetone	NA	6300	NA	20 U	20 U	20 U	20 U
Benzene	0.46	5	5	1 U	1 U	1 U	1 U
Bromodichloromethane	0.13	0.2	80	1 U	1 U	1 U	1 U
Bromoform	3.3	1	80	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	0.75	9.8	NA	2 U	2 U	2 U	2 U
Carbon disulfide	81	700	NA	1 U	1 U	1 U	1 U
Carbon tetrachloride	0.46	5	5	1 U	1 U	1 U	1 U
Chlorobenzene	7.8	100	100	1 U	1 U	1 U	1 U
Chloroethane	2100	NA	NA	2 U	2 U	2 U	2 U
Chloroform	0.22	0.2	80	1 U	1 U	1 U	1 U
Chloromethane (Methyl chloride)	19	NA	NA	1 U	1 U	1 U	1 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-09-Water-RW-120319	MPGI-11-Water-RW-120319	MPGI-12-Water-RW-120319	MPGI-13-Water-RW-120319
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/3/2019	12/3/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	3.6	70	70	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U	1 U
Cyclohexane	1300	NA	NA	1 U	1 U	1 U	1 U
Dibromochloromethane	0.87	140	80	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	20	NA	NA	2 U	2 U	2 U	2 U
Ethylbenzene	1.5	700	700	1 U	1 U	1 U	1 U
Isopropylbenzene	45	NA	NA	1 U	1 U	1 U	1 U
Methyl acetate	2000	NA	NA	1 U	1 U	1 U	1 U
Methyl tertiary butyl ether (MTBE)	14	NA	NA	1 U	1 U	1 U	1 U
Methylcyclohexane	NA	NA	NA	5 U	5 U	5 U	5 U
Methylene chloride	11	5	5	1 U	1 U	1 U	1 U
Styrene	120	100	100	1 U	1 U	1 U	1 U
Tetrachloroethene	4.1	5	5	1 U	1 U	1 U	1 U
Toluene	110	1000	1000	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	36	100	100	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U	1 U
Trichloroethene	0.28	5	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	520	NA	NA	1 U	1 U	1 U	1 U
Vinyl chloride	0.019	2	2	1 U	1 U	1 U	1 U
Xylenes (total)	19	10000	10000	1 U	1 U	1 U	1 U
1,1'-Biphenyl	NA	NA	NA	4 U	4 U	4 U	4 U
2,4,5-Trichlorophenol	120	700	NA	4 U	4 U	4 U	4 U
2,4,6-Trichlorophenol	1.2	10	NA	4 U	4 U	4 U	4 U
2,4-Dichlorophenol	4.6	21	NA	8 U	8 U	8 U	8 U
2,4-Dimethylphenol	36	140	NA	4 U	4 U	4 U	4 U
2,4-Dinitrophenol	3.9	14	NA	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	0.24	0.02	NA	8 U	8 U	8 U	8 U
2,6-Dinitrotoluene	0.049	0.31	NA	8 U	8 U	8 U	8 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-09-Water-RW-120319	MPGI-11-Water-RW-120319	MPGI-12-Water-RW-120319	MPGI-13-Water-RW-120319
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/3/2019	12/3/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L	µg/L
2-Chloronaphthalene	75	NA	NA	4 U	4 U	4 U	4 U
2-Chlorophenol	9.1	35	NA	4 U	4 U	4 U	4 U
2-Methylnaphthalene	3.6	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
2-Methylphenol	93	350	NA	4 U	4 U	4 U	4 U
2-Nitroaniline	19	NA	NA	8 U	8 U	8 U	8 U
2-Nitrophenol	NA	NA	NA	4 U	4 U	4 U	4 U
3,3'-Dichlorobenzidine	0.13	20	NA	4 U	4 U	4 U	4 U
3+4-Methylphenol	190	NA	NA	4 U	4 U	4 U	4 U
3-Nitroaniline	NA	NA	NA	8 U	8 U	8 U	8 U
4,6-Dinitro-2-methylphenol	0.15	NA	NA	20 U	20 U	20 U	20 U
4-Bromophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U	4 U
4-Chloro-3-methyl phenol	140	NA	NA	4 U	4 U	4 U	4 U
4-Chloroaniline	0.37	28	NA	8 U	8 U	8 U	8 U
4-Chlorophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U	4 U
4-Nitroaniline	3.8	NA	NA	8 U	8 U	8 U	8 U
4-Nitrophenol	NA	NA	NA	20 U	20 U	20 U	20 U
Acenaphthene	53	420	NA	0.8 U	0.8 U	0.8 U	0.8 U
Acenaphthylene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Acetophenone	190	NA	NA	4 U	4 U	4 U	4 U
Anthracene	180	2100	NA	0.8 U	0.8 U	0.8 U	0.8 U
Atrazine	0.3	3	3	4 U	4 U	4 U	4 U
Benzaldehyde	19	NA	NA	8 U	8 U	8 U	8 U
Benzo(a)anthracene	0.03	0.13	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(a)pyrene	0.025	0.2	0.2	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(b)fluoranthene	0.25	0.18	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(g,h,i)perylene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(k)fluoranthene	2.5	0.17	NA	0.8 U	0.8 U	0.8 U	0.8 U
bis (2-Chloro-1-methylethyl) ether	71	NA	NA	4 U	4 U	4 U	4 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)**	**35 IAC 742 Class I Groundwater Objective (µg/L)**	**MCLs: Drinking Water (µg/L)**	MPGI-09-Water-RW-120319	MPGI-11-Water-RW-120319	MPGI-12-Water-RW-120319	MPGI-13-Water-RW-120319
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/3/2019	12/3/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L	µg/L
bis(2-Chloroethoxy)methane	5.9	NA	NA	4 U	4 U	4 U	4 U
bis(2-Chloroethyl)ether	0.014	10	NA	4 UJ	4 UJ	4 UJ	4 UJ
bis(2-Ethylhexyl)phthalate	5.6	6	6	4 U	4 U	4 U	4 U
Butyl benzyl phthalate	16	1400	NA	4 U	4 U	4 U	4 U
Caprolactam	990	NA	NA	8 U	8 U	8 U	8 U
Carbazole	NA	NA	NA	4 U	4 U	4 U	4 U
Chrysene	25	1.5	NA	0.8 U	0.8 U	0.8 U	0.8 U
Dibenzo(a,h)anthracene	0.025	0.3	NA	0.8 U	0.8 U	0.8 U	0.8 U
Dibenzofuran	0.79	NA	NA	4 U	4 U	4 U	4 U
Diethylphthalate	1500	5600	NA	4 U	4 U	4 U	4 U
Dimethyl phthalate	NA	NA	NA	4 U	4 U	4 U	4 U
Di-n-butyl phthalate	90	700	NA	4 U	4 U	4 U	4 U
Di-n-octylphthalate	20	140	NA	4 U	4 U	4 U	4 U
Fluoranthene	80	280	NA	0.8 U	0.8 U	0.8 U	0.8 U
Fluorene	29	280	NA	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobenzene	0.0098	0.06	1	4 U	4 U	4 U	4 U
Hexachlorobutadiene	0.14	NA	NA	4 U	4 U	4 U	4 U
Hexachlorocyclopentadiene	0.041	50	50	20 U	20 U	20 U	20 U
Hexachloroethane	0.33	7	NA	4 U	4 U	4 U	4 U
Indeno(1,2,3-c,d)pyrene	0.25	0.43	NA	0.8 U	0.8 U	0.8 U	0.8 U
Isophorone	78	1400	NA	4 U	4 U	4 U	4 U
Naphthalene	0.17	140	NA	0.8 U	0.8 U	0.8 U	0.8 U
Nitrobenzene	0.14	3.5	NA	4 U	4 U	4 U	4 U
N-Nitrosodi-n-propylamine	0.011	1.8	NA	4 U	4 U	4 U	4 U
N-Nitrosodiphenylamine (Diphenylamine)	12	3.2	NA	4 U	4 U	4 U	4 U
Pentachlorophenol	0.041	1	1	20 U	20 U	20 U	20 U
Phenanthrene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Phenol	580	100	NA	4 U	4 U	4 U	4 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-09-Water-RW-120319	MPGI-11-Water-RW-120319	MPGI-12-Water-RW-120319	MPGI-13-Water-RW-120319
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/3/2019	12/3/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L	µg/L
Pyrene	12	210	NA	0.8 U	0.8 U	0.8 U	0.8 U

Notes:

IAC = Illinois Administrative Code

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

MPGI = MPG Industries

NA = Not applicable

RSL = Regional screening level

RW = Residential well

TQH = Target Hazard Quotients

µg/L = Microgram per liter

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-13-Water-RW-120319-D	MPGI-20-Water-RW-120229	MPGI-21-Water-RW-120229	MPGI-22-Water-RW-120229
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/2/2019	12/2/2019	12/2/2019
Analyte				µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	800	200	200	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	0.076	NA	NA	1 U	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	NA	NA	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	0.041	5	5	1 U	1 U	1 U	1 U
1,1-Dichloroethane	2.8	700	NA	1 U	1 U	1 U	1 U
1,1-Dichloroethene	28	7	7	1 UJ	1 U	1 U	1 U
1,2,4-Trichlorobenzene	0.4	70	70	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00033	0.2	0.2	1 U	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.05	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	30	600	600	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.17	5	5	1 U	1 U	1 U	1 U
1,2-Dichloropropane	0.82	5	5	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	NA	NA	NA	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	0.48	75	75	1 U	1 U	1 U	1 U
2-Butanone (MEK)	560	NA	NA	10 U	10 U	10 U	10 U
2-Hexanone	3.8	NA	NA	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	630	NA	NA	10 U	10 U	10 U	10 U
Acetone	NA	6300	NA	20 U	20 U	20 U	20 U
Benzene	0.46	5	5	1 U	1 U	1 U	1 U
Bromodichloromethane	0.13	0.2	80	1 U	1 U	1 U	1 U
Bromoform	3.3	1	80	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	0.75	9.8	NA	2 U	2 U	2 U	2 U
Carbon disulfide	81	700	NA	1 U	1 U	1 U	1 U
Carbon tetrachloride	0.46	5	5	1 U	1 U	1 U	1 U
Chlorobenzene	7.8	100	100	1 U	1 U	1 U	1 U
Chloroethane	2100	NA	NA	2 U	2 U	2 U	2 U
Chloroform	0.22	0.2	80	1 U	1 U	1 U	1 U
Chloromethane (Methyl chloride)	19	NA	NA	1 U	1 U	1 U	1 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-13-Water-RW-120319-D	MPGI-20-Water-RW-120229	MPGI-21-Water-RW-120229	MPGI-22-Water-RW-120229
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/2/2019	12/2/2019	12/2/2019
Analyte				µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	3.6	70	70	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U	1 U
Cyclohexane	1300	NA	NA	1 U	1 U	1 U	1 U
Dibromochloromethane	0.87	140	80	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	20	NA	NA	2 U	2 U	2 U	2 U
Ethylbenzene	1.5	700	700	1 U	1 U	1 U	1 U
Isopropylbenzene	45	NA	NA	1 U	1 U	1 U	1 U
Methyl acetate	2000	NA	NA	1 U	1 U	1 U	1 U
Methyl tertiary butyl ether (MTBE)	14	NA	NA	1 U	1 U	1 U	1 U
Methylcyclohexane	NA	NA	NA	5 U	5 U	5 U	5 U
Methylene chloride	11	5	5	1 U	1 U	1 U	1 U
Styrene	120	100	100	1 U	1 U	1 U	1 U
Tetrachloroethene	4.1	5	5	1 U	1 U	1 U	1 U
Toluene	110	1000	1000	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	36	100	100	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U	1 U
Trichloroethene	0.28	5	5	1 U	1 U	1 U	1 U
Trichlorofluoromethane	520	NA	NA	1 U	1 U	1 U	1 U
Vinyl chloride	0.019	2	2	1 U	1 U	1 U	1 U
Xylenes (total)	19	10000	10000	1 U	1 U	1 U	1 U
1,1'-Biphenyl	NA	NA	NA	4 U	4 U	4 U	4 U
2,4,5-Trichlorophenol	120	700	NA	4 U	4 U	4 U	4 U
2,4,6-Trichlorophenol	1.2	10	NA	4 U	4 U	4 U	4 U
2,4-Dichlorophenol	4.6	21	NA	8 U	8 U	8 U	8 U
2,4-Dimethylphenol	36	140	NA	4 U	4 U	4 U	4 U
2,4-Dinitrophenol	3.9	14	NA	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	0.24	0.02	NA	8 U	8 U	8 U	8 U
2,6-Dinitrotoluene	0.049	0.31	NA	8 U	8 U	8 U	8 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-13-Water-RW-120319-D	MPGI-20-Water-RW-120229	MPGI-21-Water-RW-120229	MPGI-22-Water-RW-120229
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/2/2019	12/2/2019	12/2/2019
Analyte				µg/L	µg/L	µg/L	µg/L
2-Chloronaphthalene	75	NA	NA	4 U	4 U	4 U	4 U
2-Chlorophenol	9.1	35	NA	4 U	4 U	4 U	4 U
2-Methylnaphthalene	3.6	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
2-Methylphenol	93	350	NA	4 U	4 U	4 U	4 U
2-Nitroaniline	19	NA	NA	8 U	8 U	8 U	8 U
2-Nitrophenol	NA	NA	NA	4 U	4 U	4 U	4 U
3,3'-Dichlorobenzidine	0.13	20	NA	4 U	4 U	4 U	4 U
3+4-Methylphenol	190	NA	NA	4 U	4 U	4 U	4 U
3-Nitroaniline	NA	NA	NA	8 U	8 U	8 U	8 U
4,6-Dinitro-2-methylphenol	0.15	NA	NA	20 U	20 U	20 U	20 U
4-Bromophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U	4 U
4-Chloro-3-methyl phenol	140	NA	NA	4 U	4 U	4 U	4 U
4-Chloroaniline	0.37	28	NA	8 U	8 U	8 U	8 U
4-Chlorophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U	4 U
4-Nitroaniline	3.8	NA	NA	8 U	8 U	8 U	8 U
4-Nitrophenol	NA	NA	NA	20 U	20 U	20 U	20 U
Acenaphthene	53	420	NA	0.8 U	0.8 U	0.8 U	0.8 U
Acenaphthylene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Acetophenone	190	NA	NA	4 U	4 U	4 U	4 U
Anthracene	180	2100	NA	0.8 U	0.8 U	0.8 U	0.8 U
Atrazine	0.3	3	3	4 U	4 U	4 U	4 U
Benzaldehyde	19	NA	NA	8 U	8 U	8 U	8 U
Benzo(a)anthracene	0.03	0.13	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(a)pyrene	0.025	0.2	0.2	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(b)fluoranthene	0.25	0.18	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(g,h,i)perylene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Benzo(k)fluoranthene	2.5	0.17	NA	0.8 U	0.8 U	0.8 U	0.8 U
bis (2-Chloro-1-methylethyl) ether	71	NA	NA	4 U	4 U	4 U	4 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-13-Water-RW-120319-D	MPGI-20-Water-RW-120229	MPGI-21-Water-RW-120229	MPGI-22-Water-RW-120229
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/2/2019	12/2/2019	12/2/2019
Analyte				µg/L	µg/L	µg/L	µg/L
bis(2-Chloroethoxy)methane	5.9	NA	NA	4 U	4 U	4 U	4 U
bis(2-Chloroethyl)ether	0.014	10	NA	4 UJ	4 U	4 U	4 U
bis(2-Ethylhexyl)phthalate	5.6	6	6	4 U	4 U	4 U	4 U
Butyl benzyl phthalate	16	1400	NA	4 U	4 U	4 U	4 U
Caprolactam	990	NA	NA	8 U	8 U	8 U	8 U
Carbazole	NA	NA	NA	4 U	4 U	4 U	4 U
Chrysene	25	1.5	NA	0.8 U	0.8 U	0.8 U	0.8 U
Dibenzo(a,h)anthracene	0.025	0.3	NA	0.8 U	0.8 U	0.8 U	0.8 U
Dibenzofuran	0.79	NA	NA	4 U	4 U	4 U	4 U
Diethylphthalate	1500	5600	NA	4 U	4 U	4 U	4 U
Dimethyl phthalate	NA	NA	NA	4 U	4 U	4 U	4 U
Di-n-butyl phthalate	90	700	NA	4 U	4 U	4 U	4 U
Di-n-octylphthalate	20	140	NA	4 U	4 U	4 U	4 U
Fluoranthene	80	280	NA	0.8 U	0.8 U	0.8 U	0.8 U
Fluorene	29	280	NA	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobenzene	0.0098	0.06	1	4 U	4 U	4 U	4 U
Hexachlorobutadiene	0.14	NA	NA	4 U	4 U	4 U	4 U
Hexachlorocyclopentadiene	0.041	50	50	20 U	20 U	20 U	20 U
Hexachloroethane	0.33	7	NA	4 U	4 U	4 U	4 U
Indeno(1,2,3-c,d)pyrene	0.25	0.43	NA	0.8 U	0.8 U	0.8 U	0.8 U
Isophorone	78	1400	NA	4 U	4 U	4 U	4 U
Naphthalene	0.17	140	NA	0.8 U	0.8 U	0.8 U	0.8 U
Nitrobenzene	0.14	3.5	NA	4 U	4 U	4 U	4 U
N-Nitrosodi-n-propylamine	0.011	1.8	NA	4 U	4 U	4 U	4 U
N-Nitrosodiphenylamine (Diphenylamine)	12	3.2	NA	4 U	4 U	4 U	4 U
Pentachlorophenol	0.041	1	1	20 U	20 U	20 U	20 U
Phenanthrene	NA	NA	NA	0.8 U	0.8 U	0.8 U	0.8 U
Phenol	580	100	NA	4 U	4 U	4 U	4 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-13-Water-RW-120319-D	MPGI-20-Water-RW-120229	MPGI-21-Water-RW-120229	MPGI-22-Water-RW-120229
Matrix				Water	Water	Water	Water
Date				12/3/2019	12/2/2019	12/2/2019	12/2/2019
Analyte				µg/L	µg/L	µg/L	µg/L
Pyrene	12	210	NA	0.8 U	0.8 U	0.8 U	0.8 U

Notes:

IAC = Illinois Administrative Code

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

MPGI = MPG Industries

NA = Not applicable

RSL = Regional screening level

RW = Residential well

TQH = Target Hazard Quotients

µg/L = Microgram per liter

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-24-Water-RW-120229	MPGI-25-Water-RW-120229	MPGI-26-Water-RW-120319
Matrix				Water	Water	Water
Date				12/2/2019	12/2/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L
1,1,1-Trichloroethane	800	200	200	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	0.076	NA	NA	1 U	1 U	1 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1000	NA	NA	1 U	1 U	1 U
1,1,2-Trichloroethane	0.041	5	5	1 U	1 U	1 U
1,1-Dichloroethane	2.8	700	NA	1 U	1 U	1 U
1,1-Dichloroethene	28	7	7	1 U	1 U	1 UJ
1,2,4-Trichlorobenzene	0.4	70	70	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	0.00033	0.2	0.2	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	0.0075	0.05	0.05	1 U	1 U	1 U
1,2-Dichlorobenzene	30	600	600	1 U	1 U	1 U
1,2-Dichloroethane	0.17	5	5	1 U	1 U	1 U
1,2-Dichloropropane	0.82	5	5	1 U	1 U	1 U
1,3-Dichlorobenzene	NA	NA	NA	1 U	1 U	1 U
1,4-Dichlorobenzene	0.48	75	75	1 U	1 U	1 U
2-Butanone (MEK)	560	NA	NA	10 U	10 U	12
2-Hexanone	3.8	NA	NA	10 U	10 U	10 U
4-Methyl-2-pentanone	630	NA	NA	10 U	10 U	10 U
Acetone	NA	6300	NA	20 U	20 U	1300
Benzene	0.46	5	5	1 U	1 U	1 U
Bromodichloromethane	0.13	0.2	80	1 U	1 U	1 U
Bromoform	3.3	1	80	1 U	1 U	1 U
Bromomethane (Methyl bromide)	0.75	9.8	NA	2 U	2 U	2 U
Carbon disulfide	81	700	NA	1 U	1 U	1 U
Carbon tetrachloride	0.46	5	5	1 U	1 U	1 U
Chlorobenzene	7.8	100	100	1 U	1 U	1 U
Chloroethane	2100	NA	NA	2 U	2 U	2 U
Chloroform	0.22	0.2	80	1 U	1 U	1 U
Chloromethane (Methyl chloride)	19	NA	NA	1 U	1 U	1 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)**	**35 IAC 742 Class I Groundwater Objective (µg/L)**	**MCLs: Drinking Water (µg/L)**	MPGI-24-Water-RW-120229	MPGI-25-Water-RW-120229	MPGI-26-Water-RW-120319
Matrix				Water	Water	Water
Date				12/2/2019	12/2/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	3.6	70	70	1 U	1 U	1 U
cis-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U
Cyclohexane	1300	NA	NA	1 U	1 U	1 U
Dibromochloromethane	0.87	140	80	1 U	1 U	1 U
Dichlorodifluoromethane	20	NA	NA	2 U	2 U	2 U
Ethylbenzene	1.5	700	700	1 U	1 U	1 U
Isopropylbenzene	45	NA	NA	1 U	1 U	1 U
Methyl acetate	2000	NA	NA	1 U	1 U	1.6
Methyl tertiary butyl ether (MTBE)	14	NA	NA	1 U	1 U	1 U
Methylcyclohexane	NA	NA	NA	5 U	5 U	5 U
Methylene chloride	11	5	5	1 U	1 U	1 U
Styrene	120	100	100	1 U	1 U	1 U
Tetrachloroethene	4.1	5	5	1 U	1 U	1 U
Toluene	110	1000	1000	1 U	1 U	1 U
trans-1,2-Dichloroethene	36	100	100	1 U	1 U	1 U
trans-1,3-Dichloropropene	NA	NA	NA	1 U	1 U	1 U
Trichloroethene	0.28	5	5	1 U	1 U	1 U
Trichlorofluoromethane	520	NA	NA	1 U	1 U	1 U
Vinyl chloride	0.019	2	2	1 U	1 U	1 U
Xylenes (total)	19	10000	10000	1 U	1 U	1 U
1,1'-Biphenyl	NA	NA	NA	4 U	4 U	4 U
2,4,5-Trichlorophenol	120	700	NA	4 U	4 U	4 U
2,4,6-Trichlorophenol	1.2	10	NA	4 U	4 U	4 U
2,4-Dichlorophenol	4.6	21	NA	8 U	8 U	8 U
2,4-Dimethylphenol	36	140	NA	4 U	4 U	4 U
2,4-Dinitrophenol	3.9	14	NA	20 U	20 U	20 U
2,4-Dinitrotoluene	0.24	0.02	NA	8 U	8 U	8 U
2,6-Dinitrotoluene	0.049	0.31	NA	8 U	8 U	8 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-24-Water-RW-120229	MPGI-25-Water-RW-120229	MPGI-26-Water-RW-120319
Matrix				Water	Water	Water
Date				12/2/2019	12/2/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L
2-Chloronaphthalene	75	NA	NA	4 U	4 U	4 U
2-Chlorophenol	9.1	35	NA	4 U	4 U	4 U
2-Methylnaphthalene	3.6	NA	NA	0.8 U	0.8 U	0.8 U
2-Methylphenol	93	350	NA	4 U	4 U	1.1 J
2-Nitroaniline	19	NA	NA	8 U	8 U	8 U
2-Nitrophenol	NA	NA	NA	4 U	4 U	4 U
3,3'-Dichlorobenzidine	0.13	20	NA	4 U	4 U	4 U
3+4-Methylphenol	190	NA	NA	4 U	4 U	7.6
3-Nitroaniline	NA	NA	NA	8 U	8 U	8 U
4,6-Dinitro-2-methylphenol	0.15	NA	NA	20 U	20 U	20 U
4-Bromophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U
4-Chloro-3-methyl phenol	140	NA	NA	4 U	4 U	4 U
4-Chloroaniline	0.37	28	NA	8 U	8 U	8 U
4-Chlorophenyl phenyl ether	NA	NA	NA	4 U	4 U	4 U
4-Nitroaniline	3.8	NA	NA	8 U	8 U	8 U
4-Nitrophenol	NA	NA	NA	20 U	20 U	20 U
Acenaphthene	53	420	NA	0.8 U	0.8 U	0.8 U
Acenaphthylene	NA	NA	NA	0.8 U	0.8 U	0.8 U
Acetophenone	190	NA	NA	4 U	4 U	4 U
Anthracene	180	2100	NA	0.8 U	0.8 U	0.8 U
Atrazine	0.3	3	3	4 U	4 U	4 U
Benzaldehyde	19	NA	NA	8 U	8 U	8 U
Benzo(a)anthracene	0.03	0.13	NA	0.8 U	0.8 U	0.8 U
Benzo(a)pyrene	0.025	0.2	0.2	0.8 U	0.8 U	0.8 U
Benzo(b)fluoranthene	0.25	0.18	NA	0.8 U	0.8 U	0.8 U
Benzo(g,h,i)perylene	NA	NA	NA	0.8 U	0.8 U	0.8 U
Benzo(k)fluoranthene	2.5	0.17	NA	0.8 U	0.8 U	0.8 U
bis (2-Chloro-1-methylethyl) ether	71	NA	NA	4 U	4 U	4 U

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	**RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)**	**35 IAC 742 Class I Groundwater Objective (µg/L)**	**MCLs: Drinking Water (µg/L)**	MPGI-24-Water-RW-120229	MPGI-25-Water-RW-120229	MPGI-26-Water-RW-120319
Matrix				Water	Water	Water
Date				12/2/2019	12/2/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L
bis(2-Chloroethoxy)methane	5.9	NA	NA	4 U	4 U	4 U
bis(2-Chloroethyl)ether	0.014	10	NA	4 U	4 U	4 UJ
bis(2-Ethylhexyl)phthalate	5.6	6	6	4 U	4 U	4.4 J+
Butyl benzyl phthalate	16	1400	NA	4 U	4 U	4 U
Caprolactam	990	NA	NA	8 U	8 U	2.7 J
Carbazole	NA	NA	NA	4 U	4 U	4 U
Chrysene	25	1.5	NA	0.8 U	0.8 U	0.8 U
Dibenzo(a,h)anthracene	0.025	0.3	NA	0.8 U	0.8 U	0.8 U
Dibenzofuran	0.79	NA	NA	4 U	4 U	4 U
Diethylphthalate	1500	5600	NA	4 U	4 U	4 U
Dimethyl phthalate	NA	NA	NA	4 U	4 U	4 U
Di-n-butyl phthalate	90	700	NA	4 U	4 U	4 U
Di-n-octylphthalate	20	140	NA	4 U	4 U	4 U
Fluoranthene	80	280	NA	0.8 U	0.8 U	0.8 U
Fluorene	29	280	NA	0.8 U	0.8 U	0.8 U
Hexachlorobenzene	0.0098	0.06	1	4 U	4 U	4 U
Hexachlorobutadiene	0.14	NA	NA	4 U	4 U	4 U
Hexachlorocyclopentadiene	0.041	50	50	20 U	20 U	20 U
Hexachloroethane	0.33	7	NA	4 U	4 U	4 U
Indeno(1,2,3-c,d)pyrene	0.25	0.43	NA	0.8 U	0.8 U	0.8 U
Isophorone	78	1400	NA	4 U	4 U	4 U
Naphthalene	0.17	140	NA	0.8 U	0.8 U	0.8 U
Nitrobenzene	0.14	3.5	NA	4 U	4 U	4 U
N-Nitrosodi-n-propylamine	0.011	1.8	NA	4 U	4 U	4 U
N-Nitrosodiphenylamine (Diphenylamine)	12	3.2	NA	4 U	4 U	4 U
Pentachlorophenol	0.041	1	1	20 U	20 U	20 U
Phenanthrene	NA	NA	NA	0.8 U	0.8 U	0.8 U
Phenol	580	100	NA	4 U	4 U	5.4

Table 12 - Potable Well Water Sample Result Summary
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Sample Number	RSLs: Tapwater Cancer Risk 10^{-6} THQ = 0.1 (µg/L)	35 IAC 742 Class I Groundwater Objective (µg/L)	MCLs: Drinking Water (µg/L)	MPGI-24-Water-RW-120229	MPGI-25-Water-RW-120229	MPGI-26-Water-RW-120319
Matrix				Water	Water	Water
Date				12/2/2019	12/2/2019	12/3/2019
Analyte				µg/L	µg/L	µg/L
Pyrene	12	210	NA	0.8 U	0.8 U	0.8 U

Notes:

IAC = Illinois Administrative Code

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

MCL = Maximum Contaminant Level, as defined by the National Primary Drinking Water Regulations.

MPGI = MPG Industries

NA = Not applicable

RSL = Regional screening level

RW = Residential well

TQH = Target Hazard Quotients

µg/L = Microgram per liter

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit)

UJ = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION LOG

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 1 **Date:** August 9, 2019 **Description:** Eastern section of destroyed structure and containment berm constructed by ERRS. Photo orientation: central site property facing northeast.	
Photograph No. 2 **Date:** August 9, 2019 **Description:** Western section of destroyed structure and containment berm constructed by ERRS. Partially impacted structure in background. Photo orientation: central site property facing northwest.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 3 **Date:** August 9, 2019 **Description:** Destroyed structure and remaining drums and tanks. Photo orientation: north/central site property facing east.	
Photograph No. 4 **Date:** August 9, 2019 **Description:** Northern section of the partially impacted structure, formaldehyde-containing waste. Photo orientation: northern section of partially impacted structure facing northwest.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 5 **Date:** August 9, 2019 **Description:** Southern section of the partially impacted structure, the product storage area. Photo orientation: southern section of partially impacted structure facing south.		
Photograph No. 6 **Date:** August 9, 2019 **Description:** Impacted agricultural field (Affected Property #4) drainage ditch and absorbent boom deployed by ERRS. Residential homes in background of photo. Photo orientation: central agricultural field facing north.		

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 7 **Date:** August 9, 2019 **Description:** Impacted site entry area and soil removal by ERRS. Commercial property directly south of site in background of photo. Photo orientation: south site property facing southwest.	
Photograph No. 8 **Date:** August 28, 2019 **Description:** Northern section of the partially impacted structure, following formaldehyde waste removal by ERRS. Photo orientation: northern section of partially impacted structure facing northwest.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 9 **Date:** November 4, 2019 **Description:** Destroyed structure and drums and tanks following removal of scrap metal. Photo orientation: northwestern site property facing southeast.	
Photograph No. 10 **Date:** November 5, 2019 **Description:** R.W. Collins solidifying waste from the destroyed structure. Photo orientation: central site property facing northwest.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 11 **Date:** November 11, 2019 **Description:** R.W. Collins loading solid waste from the destroyed structure into trucks for disposal. Photo orientation: eastern site property facing south.	
Photograph No. 12 **Date:** November 14, 2019 **Description:** R.W. Collins removing soil from the impacted northern drainage area. Photo orientation: northern site property facing west.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 13 **Date:** November 20, 2019 **Description:** Cleaned concrete pad of the destroyed structure following waste removal, and rock-filled north and eastern drainage areas following soil removal by R.W. Collins. Partially impacted structure in background. Photo orientation: eastern site property facing northwest.	
Photograph No. 14 **Date:** November 20, 2019 **Description:** Rock-filled drainage ditch between I-80 and the property directly east of the site (Affected Property #1), following soil removal by R.W. Collins. Photo orientation: northern Affected Property #1 facing north.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 15 **Date:** November 25, 2019 **Description:** Flushing of underground utility tanks by Ability Septic. Photo orientation: central site property facing northwest.	
Photograph No. 16 **Date:** November 26, 2019 **Description:** Site area following removal of site waste including drums, tanks, and impacted soils. Partially impacted structure in background. Photo orientation: southeastern site property facing northwest.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 17 **Date:** December 2, 2019 Non-responsive	
Photograph No. 18 **Date:** December 4, 2019 **Description:** GeoServe collecting a soil boring from the northern drainage area after soil removal. Photo orientation: northern site property facing northeast.	

Photographic Documentation

Client: US Environmental Protection Agency Region 5
Site Name: Joliet Chemical Fire PRP Cleanup Site
Location: New Lenox Township, Will County, Illinois

Prepared by: Brendan Martin
TO-TOLIN: F0069-0002AI001
Dates: August 7, 2019 – December 20, 2019

Photograph No. 19 **Date:** December 19, 2019 **Description:** R.W. Collins removing soil from impacted agricultural field (Affected Property #4). Photo orientation: northeastern Affected Property #4 facing north.	
Photograph No. 20 **Date:** December 20, 2019 **Description:** R.W. Collins loading soil waste from the agricultural field (Affected Property #4) into trucks for disposal. Photo orientation: north Affected Property #4 facing east.	

APPENDIX D
START FIELD NOTES

INCH

MADE IN TACOMA
SINCE 1916
Rite in the Rain
DEFYING MOTHER NATURE

Name _____

START FIELD LOGBOOK

Logbook Tracking Number _____

Site Name Joliet Chemical Fire Site (MPG Industries)

Issue to _____

Date Issued 8/8/19

TDD # 0001-1908-002

MADE IN USA · RITE GREEN · Archival

RiteintheRain.com

CONTENTS

PAGE	REFERENCE	DATE

Joliet Chemical Fire ER 8/8/19

1310 START (Knox) onsite —— KK

Weather: 86°F, mostly cloudy, wind W @ 9mph humidity 47%. —— KK

1315 State fire marshall + Will County sheriff onsite —— KK

1350 USEPA (OSCs Hassan + Ruesch), Will County Health Dept, ERRS, + Illinois EPA onsite —— KK

1403 Plan to collect water and/or soil samples at + around site + collect source material from buildings

1413 Site walk through of sample locations —— KK

#1, 2, +3 collect solid samples

#4 soil + liquid sample —— KK

#5 Liquid, had PH of 5 + hot to touch —— KK

#6 Liquid —— KK

#7 Liquid + solid —— KK

#8 Liquid + solid —— KK

#9 creek, liquid + solid —— KK

#10 Liquid + solid —— KK

#11 Downstream, liquid + solid —— KK

1441 ERRS will berm around four collection points to prevent further run off —— KK

1502 Sampling will begin with locations #1-3 around burn site —— KK

1520 Soil sample at #01, located within burned drum pile adjacent to burned out building, inside berm, N end of property. Solid sample from surface only, photo emailed.

1540 Sample 002 not taken due to conditions inside building. Product containers photos taken sent 'Action' embalming fluid + gel.

1545 Sample 003 taken Solid only, inside containment south side of building at front of trailer. Oily residue

1643 Sample 004 taken from ditch filled w/ oily liquid S end of property near culvert entrance. See photo 004. Liquid + soil sample taken

1707 Sample 005 not taken from frac tank not feasible at this time. ERRS will characterize

1721 Sample 006 taken solid only. blue/green/black gelatenous liquid saturated oil inside containment berm at corner of building.

1738 Sample 007 taken in ditch NE corner of property - pure oily material. soil + liquid

1817 Sample 008 outfall ditch by I-80 down from tractor

Pridle Plumbing property. liquid + solid

1818 Aplicate sample taken —— KK

1928 Will continue sampling 0700 tomorrow —— KK

0800 START offsite

8/8/19

0640 ~~KK~~ START (Knox, Cooper) onsite, IEPA, EPA (OSC Haag + Hassen), + ERRS on site —— KK

0700 Health + Safety meeting led by ERRS —— KK

- ERRS will be rebuilding berms around in preparation for rainfall Monday + START will provide air monitoring support w/ AreaRAEs

0715 OSC Hassen will pick up Area RAEs from Willowbrook while START completes sampling at locations 9, 10, 11, + 12 across I-80 in creek + soy bean field —— KK

0800 ERRS begin berm work on ditch on S end of burn area

0830 Collect water + soil samples from location 09, located directly north of MPG Industries across I-80 in culvert between north adjacent soybean fields —— KK

0905 Collect sample 10A soil, no liquid at point, only concentrated product, located on west bank of drainage culvert, north of boom —— KK

Joliet Chemical Fire 8/9/19

0915 Collect soil sample at 10B, no liquid, large amounts of product pooled on top of soil; located 5 feet in front of boom in middle of culvert, N of sample point 09 — KK

0925 Collect soil sample at 10C, no liquid, collected on east bank of culvert north of boom where there are dead soybeans but no product — KK

1000 Collect soil sample at 11, no liquid, collected in large ~~dark~~ area of dead soybeans where product flowing from culvert had pooled, NE of location 10 — KK

1005 Duplicate sample for location 11

1020 Collect soil sample at 12, no liquid, no visible product but dead soybeans, located 10ft west of furthest ~~west~~ east boom, 300 ft ~~east~~ west of residences

1105 Collect duplicate water sample at location 09, no water at other sample locations — KK

1232 New Lenox public works on site — KK

Backlog: 1145 Will County EMA on site with drone — KK

1250 Public works & Will County EMA offsite — KK

1400 ERRS collect waste sample from shipping container (location 05) for waste profiling

1406 Drone overview found more ~~product~~ potential runoff product in other soybean field northwest of site — KK

1427 thick sheen pooling just north of sample location 09 — KK

1433 PH of 9 in runoff pool in soybean field west of culvert between sample locations 9+10

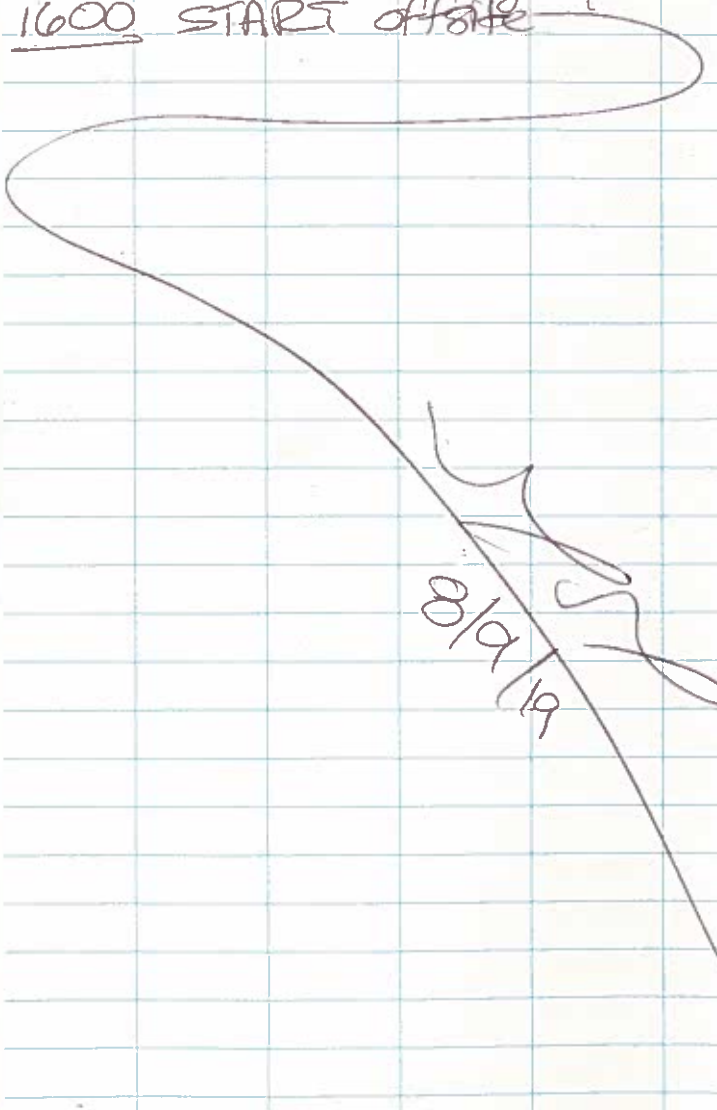
1530 ERRS will continue berming/containment today & tomorrow + apply absorbent pad to oil product in culvert across I-80 tomorrow; plan to excavate out impacted soil from offsite next week — KK

Rite in the Rain

8 Joliet Chemical Fire 08/09/19

1540 Work for START planned to resume Tuesday 8/13 ~~TK~~

1600 START ~~offsite~~



8/13/19 9

1115 START (Houle, Renner), EPA (Hassan), and ERRS onsite. Weather: 80° high 83°, cloudy, winds NW @ 6 mph, 72% humidity

1130 ITMR3 on and calibrated except for CO, Casella pumps calibrated

Pump #	Flow Rate (L/min)
4177389-1	1.252
2871746-2	1.233
4771483-3	1.244
3488013-4	1.070
2652851-5	1.135

Pumps 1-3 for Formaldehyde samples, pumps 4-5 for amines

1140 Plan is to set up pumps in product room and formaldehyde room then identify drums for sampling

1205 Pumps 2 and 5 started in product room

Minor VOCs detected in formaldehyde room. Setting up pumps in room (pumps 1 & 4)

1221 Pumps 1 and 4 started

1220 START and EPA conduct walk through formaldehyde room. Identify 5 spots for sampling product remnant
1- blue crystalline product
2- white crystalline product
3- blue gel product
4- blue product
5- yellow product

1330 Amines sample JCF-AIR-FR-20190813 collected. 97.61 L final sample volume.

1345 Amines sample JCF-AIR-FR-20190813 collected. 98.44 L final volume.

1405 Formaldehyde sample JCF-AIR-FR-20190813 collected.

1411 Formaldehyde sample JCF-AIR-FR-20190813 collected.

1425 START offsite

RM

8/26/19

0700 START (Knox, Renner) & ERRS on site ——— KK

Weather: 67°F, rainy, humidity 100%, wind SE @ 7mph ——— KK

0705 EPA OSC Hassan on site

0710 Health & Safety meeting ERRS will load out product & waste into roll off boxes, START will monitor formaldehyde & particulates in adjacent product room to ensure no migration from embalming room ——— KK

~~0800 KK~~ 0745 formaldehyde meter calibrated to temperature ——— KK

0800 Take formaldehyde reading in product room 0.02ppm set up portable DustTrak for continuous monitoring during removal ——— KK

0805 Take formaldehyde reading in embalming room: 0.1ppm ——— KK

0810 Due to heavy rain throughout day, no perimeter AreaRAE set up will

0830 ERRS use skidsteer to move product into piles for removal

0843 Reading in embalming room 0.07ppm

Rite in the Rain

8/26/19 Joliet Chemical

0847 Reading in product room 0.03 ppm
0857 ERRS removed metal door blocking entrance of embalming room; reading 0.09 ppm
0906 ERRS using skidsteer + shovels to remove metal waste from embalming room
0907 Redding in product room 0.04 ppm — KK
0930 Will County EMA onsite
0945 ERRS break, reading in embalming room 0.64 ppm
1015 Rain subsided, cal Area RAE + setup in product run — KK
1020 ERRS resume work
1052 Reading in product room 0.06 ppm
1130 Recalibrate formaldehyde meter — KK
1137 Reading @ wall opening between product rooms 0.25 ppm — KK
1140 Will County EMA offsite — KK
1150 ERRS break — KK
1155 Reading in center of embalming room 1.06 ppm — KK

8/26/19 Joliet Chemical Fire

1315 ERRS continue moving waste product into piles until rolloff onsite — KK
1323 recalibrate formaldehyde meter — KK
1326 Reading 0.26 ppm in product room — KK
1328 Reading 0.52 ppm at open wall between embalming/product room
1330 Reading outside building DW of embalming room 0.02 ppm
1419 - CO levels hit 17 ppm near work zone, a break was called to allow room to air out
1425 - START putting out an additional Area RAE STEEL to monitor CO levels — KK
1430 - START got a Formaldehyde read. of 5.1 ppm in death room
1451 - Roll-off arrived on-site for waste disposal — KK
1508 Formaldehyde @ 0.74 ppm in product room near north wall — KK
1535 0.68 ppm @ product room north wall
1610 - 0.62 ppm during Rollout loading in room

Rite in the Rain

8/26/19 Joliet Chemical Fire

1633 0.80 ppm formaldehyde, 0.000 FWA for handheld Dustrak

1645 ERRS wrap for day, 0.8ppm in product room, 1.27 ppm in embalming room — KK

1655 warehouse taped off, rolloff covered & site gate locked — KK

1700 START offsite — KK

8/26/19

8/27/19 Joliet Chemical Fire

0700 START (Knox Martin) onsite with ERRS + OSC Hassan — KK

Weather 67°F, high 83°F, mostly cloudy | 100% humidity

0710 Health & Safety — KK

0730 Calibrate equipment, START will continue monitoring formaldehyde, Particulates, VOCs, + CO during removal of waste product from embalming room

0800 ERRS moving waste product into rolloff boxes — KK

0830 Reading in product room at north wall, adj to embalming room 1.23 ppm — KK

0840 Reading at roll off box 0.25pp

0909 Reading DW of rolloff 0.02 ppm — KK

0915 ERRS break — KK

0932 0.62 ppm in embalming room

0937 0.74 ppm in product room at north wall — KK

0941 0.05 ppm at S fenceline

1013 Will County on site (EMA)

Backlog 0930: skidsteer broken, replacement being mob'd to site

Rite in the Rain

16 8/27/19 Joliet Chemical

1020 New skid steer on site
1025 0.03ppm in staging area parking lot, DW of rolloff
1040 Third roll off box onsite
1044 2.85 ppm in embalming room while ERRS warming — KK
1111 0.01 ppm at S fenceline — KK
1115 0.01 ppm West of building, upwind — KK
1119 0.84 ppm at N wall of product room
1122 0.78 ppm at S wall of product room
1125 0.59 ppm at central bay door of product room — KK
1128 CO at 32 ppm in product room due to generator, ERRS more to outside building
1130 0.12 ppm at rolloff box
1150 ERRS break for lunch, site walk with OSC, owner & Clean Harbors w/ formedahyde meter to confirm no respiratory protection required — KK
1210 8 SET roll off boxes onsite & frac tank w/ oil product
1213 At least 10 bulged drums &

8/27/19 Joliet Chem 17

~50 close-top drums that are full in fully destroyed building on S boundary of site — KK
1214 0.04 ppm at center of site
1216 0.07 ppm at destroyed building N boundary @ berm — KK
1219 0.03 ppm @ east fenceline
1227 1 full frac tank & 1 empty at outfall adj to I-80 from ERRS
1232 Safety-Kleen onsite — KK
1238 Site walk w/ ERRS, owner, EPA, Clean Harbors & Safety-Kleen
1310 north wall of product room 026 ppm — KK
1312 0.36 ppm on south side of product room — KK
1315 3.81 ppm in embalming room
1323 0.02 ppm at south fenceline
1326 0.0 ppm at east fenceline
1412 ERRS break, CO on multiRAE 21 ppm — KK
1425 8.81 ppm in embalming room
1432 2.14 ppm @ south entrance of product room
1450 Leaking product found on

Rite in the Rain

floor around drums, reading 3.78 ppm —— KK

1511 2.05 ppm in central product room —— KK

1515 MultiRAE CO alarm, 34 ppm. ERRS break —— KK

1531 Leaking drum labeled Biotherg AS40 —— KK

1533 Isolated product reads at 3.03 ppm on formaldehyde meter —— KK

Note: Viscous liquid stored in fiber drum —— KK

1600 ERRS will apply oil dry to leaked product —— KK

1622 3.25 ppm in South product room —— KK

1634 3.86 ppm in SW corner near leaking drum —— KK

1648 0.52 ppm on product outside after removed from product room —KK

1712 Leaking drum determined to be 30 gal "CMC12M31P"

1716 ERRS close off roll off box

1724 Level at drum after cleanup

of leaked product 1.63 ppm

1728 Drum of STEOL CS-4160 found, flashpoint of 78°F, full drums observed stacked upside down —— KK

1731 remove barrel w/ ~~oil dry~~ CMC12M31P product ~~+ absorbant rags~~ but + fiber drum with damaged lid, store outside embalming room on sand

1742 Tentative plan to remove pallet with leaking drum + spot clean tomorrow

1744 Removed drums loosely covered with drum liners —— KK

1757 lock up site —— KK

1820 START offsite

8/27/19

8/28/19 Joliet Chemical

0700 START (Martin, Knox) onsite with ERRS + OSC Ruesch —— KK
Weather: 60°F, high 77°F, sunny, WSW 5mph, 87% humidity
0705 Health + Safety meeting, plan to ~~make~~ solidify drums removed from product room yesterday + finish cleaning embalming room —— KK
0715 START calibrate multiRAEs + formaldehyde meter —— KK
0732 0.66 ppm formaldehyde on North side of product room —— KK
0738 0.57 ppm on south side of product room —— KK
0740 0.58 ppm in the SW corner where leaking drums were removed
0744 0.37 ppm in embalming room
0750 0.02 ppm at South fenceline
0751 Will County EMA onsite
Backlog 0710 OSC Hassan onsite
0752 0.02 ppm at east fenceline
0756 ERRS will collect waste profile samples for waste loaded into roll offs from embalming room —— KK

8/28/19 Joliet Chemical

0833 0.69 ppm in South side of product room —— KK
0838 0.50 ppm on north side of product room —— KK
0839 remove pallet leaking drum was sitting on in SW corner + apply oil dry —— KK
0853 ERRS continue loading out waste into roll off + will sweep out embalming room —— KK
0856 0.00 ppm at south fenceline
0925 ERRS break —— KK
0932 0.23 ppm in South half of product room —— KK
0935 0.55 ppm in SW corner in breathing zone above oil dry
0938 0.46 ppm in north side of product room —— KK
0942 0.14 ppm in embalming room
0946 0.02 ppm South fenceline — KK
0949 0.0 ppm east fenceline — KK
1102 ERRS scraping up oil dry + product into poly drum liner
1104 0.21 ppm in south product room
1106 VOCs peak at 4.7 ppm in SW corner

Rite in the Rain

during oil dry sweep up —— KK
1107 2.6 ppm formaldehyde in breathing zone in SW corner where leaked product being removed, elevated reading likely from VOC related interferance —— KK
1124 0.06 ppm in north product room
1126 0.26 ppm in embalming room
1131 0.01 ppm downwind edge of open rollaff BT 2906 —— BM
1134 0.00 ppm at south fenceline
1200 ERRS break for lunch
1258 0.11 ppm in south product room
1300 0.21 ppm at SW corner, 0.2 ppm VOCs —— KK
1302 0.08 ppm in north product room
1304 0.27 ppm in embalming room
1306 ERRS decon equipment
1515 EPA close up site, will clear building for VOCs + formaldehyde tomorrow morning before owner begins loading out unburned product from product room
1640 START offsite —— KK

0650 START (Knox) onsite, ERRS + OSC Ruesch already onsite
Weather: 54°F, high 87°F, sunny, wind calm, 100% humidity —— KK
0713 Reading on formaldehyde meter in center of product room 0.07 ppm
0722 0.34 ppm in embalming room
0728 0.04 ppm in SW corner where oil dry was put down —— KK
0731 0.27 ppm in north product room
0734 0.07 ppm outside of east embalming room entrance
0735 OSC Hassan onsite —— KK
0736 Owner contractors/employees onsite with forklift begin removing pallets in south product room to access product drums —— KK
0744 Semi onsite at staging area (complete tracing USDOT 874180)
0800 Semi on MFG property to be loaded with product —— KK
0809 Begin loading product:
20 pallets w/ 4 metal drums of finished product (SHR 766000T), drums checked & logged before loaded into truck

Rite in the Rain

8/29/19 Joliet Chemical

0839 finish loading first truck
0841 0.16 ppm at north wall of product room —— KK
0844 0.15 ppm in central product room
0847 0.11 ppm in south product rooms
0956 Semi onsite (Navets Logistics Inc US DOT 2611592) —— KK
1005 Owner of MPG onsite —— KK
Begin loading product:
22 pallets with 4 drums (Dailube GS-440L) —— KK
1041 finish loading truck
1045 IEPA on site —— KK
1055 IEPA site walk —— KK
1059 0.13 ppm in central product room
1102 0.22 ppm in embalming room
1130 Semi onsite (Chicagoland warehouse + transportation, USDOT 1412781)
1140 Begin loading out truck:
4 plastic totes (Dailube GS-440L) (1000kg) —— KK
1148 finish loading truck —— KK
1205 IEPA offsite —— KK
1245 Semi onsite (Real Trucking, USDOT 1637762) —— KK

8/29/19 Joliet Chemical

1256 load truck with:
1 plastic tote (Dailube GS-440L) (1000 kg)
2 pallets w/ 4 drums (Dailube GS-440L) (200kg each)
1319 finish loading truck — KK
1320 Will County EMA onsite
1407 Semi onsite (Custom Companies Inc, USDOT 781203) —— KK
1412 load out truck with:
1 pallet of 4 drums
1 pallet of 3 drums
1 pallet of 4 drums (Harmo Lube cutting)
1435 finish loading truck — KK
1445 lock up MPG —— KK
1450 START offsite —— KK

8/29/19

8/30/19 Joliet Chemical

0745 START on site, OSC Ruesch
↓ MPG Industries on site
Weather 63°F, high 78°F, cloudy
NNW 4mph, humidity 81%. —KK
0813 0.01 ppm on formaldehyde meter in south product room
0816 0.03 ppm in central product room
0819 0.04 ppm in north product room
0821 0.12 ppm in embalming room
0823 Semi onsite (Goodeal Trucking, US DOT 3123219) —KK
0833 Load truck with:
23 pallets w/ 4 drums (MR-849)
1 pallet w/ 2 drums (MR-849)
0941 finish loading truck
1100 EPA + MPG site walk
1130 leaking tote found, moving product into new tote —KK
1152 Semi on site (Estes Express Lines, USDOT 121018) —KK
1202 Load truck with:
3 pallets 30 plastic buckets (hardening compound)
1 pallet 5 drums (vicerack)
2 pallets w/ 5 drums (hardening compound)

1215 Finish loading truck
1222 Semi onsite (Nationwide Freight, USDOT 3019343)
1226 Load truck with:
3 plastic totes (Dailube GS-4404)
7 plastic totes (Dailube GS-330)
10 pallets w/ 4 drums (H.P. London Rosin oil)
1 pallet w/ 2 drums (H.P. London Rosin oil)
1313 Semi onsite (FGE INC, USDOT 2726075)
1314 finish loading Nationwide truck
1324 Load out 4x4 pickup truck:
1 55-gal drum (Hydroflow #1)
1 55-gal drum (SAE 50 machine oil)
6 5-gallon buckets (cleaners)
1335 finish loading out 4x4
1340 Will County EMA onsite
1345 Load FGE truck with:
1 plastic tote (Dailube GS-440)
5 plastic totes (Dailube GS-330)
3 pallets w/ 4 drums (Dailube GS-550)

Rite in the Rain

 8/30/19 Joliet Chem

4 pallets w/ 4 drums (Dailube GS-325)
10 pallets w/ 4 drums (Dailube GS-425)

1414 finish loading truck — KK
1440 Van onsite to pick up drum (rust preventative product)
1453 Van offsite, block off building entrances with caution tape ——— KK
1500 lock up MPG site ——— KK
1510 START offsite

8/30/19

09/03/19 Joliet Chemical

0703 START B. Martin arrived at site. Weather 67°F, rain, overcast, winds S at 2mph. START calibrated TTMAB3 (PID), all sensors passed, START calibrated formaldemeter.
0725 USEPA Hassen arrived at site. ———
0740 START conducted air check, formaldehyde in embalming room = 0.24 ppm. ———
0743 North product room, formaldehyde = 0.13ppm
0746 South product room, formaldehyde = 0.11ppm
no PID hits in any of 3 air checks. —
0840 MPG employees arrived on site. Bobby Gill, Andy Dyke (GM), and Jerney Bedmon. Crew began organizing materials in product room, Andy estimates 2-3 trailer loads today. 1 load will return to unload due to overweight.
0942 Nationwide trailer arrived, DOT 3019343. Trailer is full, overweight loaded on 8/30. Plan to unload, reload in new trailer. —
1000 Plan is to keep trailer, redistribute weight, bring in new tractor US DOT 3019343.
1011 START checked air in product room, product room north + south both 0.09ppm for formaldehyde ———
1126 US DOT 3019343 left with load from

30 09/03/19 Joliet Chemical

US DOT 3019343 (redistributed vessel).
Schrack environmental on site.

1208 Custom trailer US DOT 781203 arrived onsite.
1210 Custom trailer left empty, no haz licence.
1235 START checked product room air for formaldehyde. north = 0.12 ppm, south = 0.10 ppm
1505 MPG crew has been organizing materials in product room since last van. START checked air/formaldehyde levels. Embalming room = 0.22 ppm, product north = 0.30 ppm, product south = 0.21 ppm.
1536 MPG employees left site
1550 START + EPA left site

Brandon Matt
09/03/19

09/04/19 Joliet Chemical 31

0703 START B. Martin arrived at site. Weather 58°F, clear, winds N at 6 mph. START calibrated PID TTMA 3 (all sensors passed) and formaldemeter.
0755 EPA Jacob Hassen on site. Jacob reported that operations were canceled due to fork operator (Bobby) being sick. EPA + START plan to take air readings and photographs.
0815 START conducted air check for formaldehyde
0815 North product room = 0.01 ppm (B2)
0817 South product room = 0.01 ppm (B2)
0820 Embalming room center = 0.27 ppm (B2)
0822 Embalming room floor = 0.50 ppm
0830 START + EPA inspected west side of building on opposite side of embalming room, formaldehyde meter detected 0.07 ppm near ground by building.
0845 START + EPA off site

Brandon Matt
09/04/19

Rite in the Rain

Log Book

Joliet PRP clean up

Rite in the Rain®

ALL-WEATHER

FIELD

№ 351FX

10-14-19 →

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Name André Baker
TETRA TECH

Address Joliet Fire PRP clean up

Phone

Project OSC Paul R. & Jacob H.
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6959

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10-14-19 Joilet Chemical Fire PRR

0900 Personell onsite (see sign in)
Objectives are to weather proof
the garage + site prep.
1000 excavator on site (Wortmann)
1015 Schrack Environ. making calls to
Replace doors + garage doors on
the warehouse
1035 Schrack plan on spreading
Sand in the front along the berm
to prevent contamination of
excavator tracks.
* weather Low 41°F - 54°F Sunny
wind East 0-10 mph
1108 ERRS onsite John B + 2 Laborers
to decon Baker + Adler Tanks
Frac tank truck onsite for
2nd round
1142 excavator moving Yang Ming
Box.
1149 united rentals on site to take
~~______~~ Baker Tank away
1200 ERRS of site
1215 Baker tank offsite
1240 Yang Box moved to blue
frac tank

1245 Sand on site to spread over impacted
area
1250 Wortmann crew using bob cat
to take all garage doors off tracks
1315 All doors (6x10) have been removed
workers continue various site prep
1400 START offsite for the day
Ron Schrack says site prep will
continue spreading sand, setting up
decon, weather proof warehouse +
adding temp wall to better insulate
warehouse areas go into Hot Zone
to find any recoverable documents
Level C dress out.

[signature]
10-14-19

4 10-21-19

0720 H+S tailgate + plan for the day. plan is to take out scrap metal + ERRS will empty water out of Blue frac tank

0730 OSC Paul onsite with air monitoring equipment

0758 ER with John B. + 3 Laborers

0800 company to pump frac tank from the plumbing supply property

0830 START going to pick up Supplies from the warehouse

1000 back onsite with Supplies turn key emptying out Blue frac tank. Excavator Sorting through Scrap metal

1051 Load #12 of Scrap metal being loaded into truck

1030 MPG Sampling drums for characterization truck Company Watchmans.

11:00 Blue frac tank is too much it will need a vac truck and is scheduled tomorrow. Drums have been labeled Most are non-haz but Some with chlorine will be labeled + overpacked

10-22-19

5

1118 START Check functionality of equipment potential bad benzene Sensor in the cabin ran

1124 Truck #2 offsite.

1130 Break

1200 excavator back Sorting Scrap metal All workers are wearing tyvek level D weather high 64°F low 45 2.18 Precip 92% humidity 15-20 mph SSE wind Cloudy Truck #3 1259

1314 Truck #3 leaving site. START + OSC Dressing out to move Some oxygen tanks out of the Rubble.

1342 crew Looking for any Salvagable paper work in the filing cabinets. everything was burned. Excavator Spread Sand over the cleared area that previously had metal on it to absorb any Liquids.

1412 Truck #4 onsite. ERRS continuing Clean up of Blue frac tank

1504 Truck #4 Last of the day. excavator spreading more Sand before end of Day.

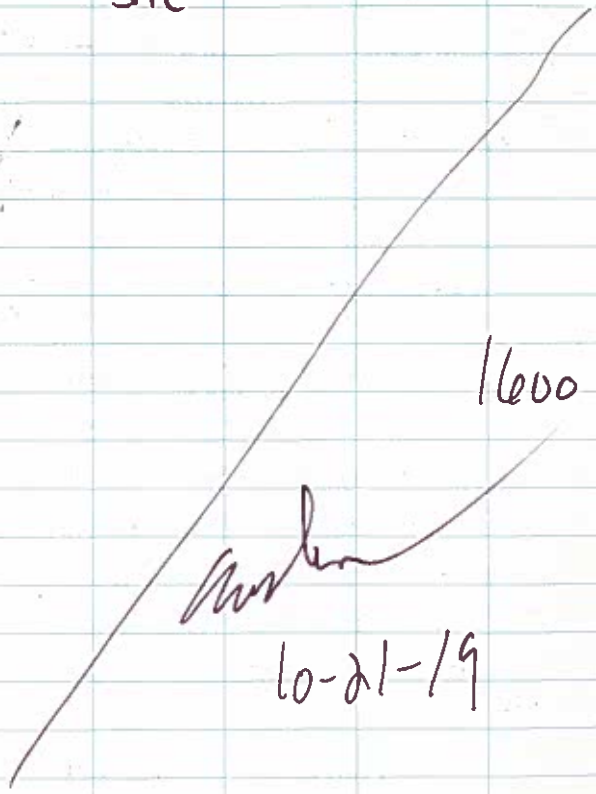
Rite in the Rain

6

1530 #4 truck Staying on Site until morning

1542 ~~@~~ ~~*~~ Turn Key enviro truck offsite Load ~~#2~~.
ERRS gathering up Supplies + will be back tomorrow

1600 ERRS offsite
START (Baker) EPA OSC off Ste



10-22-19 Joliet Fire PRP clean up

7

0700 START + EPA OSC Paul Ruesch

* Cloudy. high 51°F Low 38°F
1% Precip. wind 10-20 mpH hrly SW gust expected up to 40 mpH
Wortmenn crew onsite (2) schuck crew (2) onsite.
objective: Load out Scrap metal finish Blue frac tanks + removed offsite. Health department + Fire Chief will be onsite.

0730 - Crew prepping Site + Donning PPE
0800 - ERRS Crew onsite (ER) 3 Laborers
0813 - Fire inspector onsite ~~Stu~~ Crew is spraying Sand. Fire is private investigator for owner
0830 OSC + Investigator inside hot zone
0850 ERRS crew done with blue frac moving on to the other tank on the plumbers property
0914 #1 Truck for metal onsite
0930 START taking Samples in Right of way 0930 MPGI-102219-01 North
MPGI-102219-01D North
0935 MPGI-102219-02 South
0937 MPGI-102219-03 South wall

10-22-19

1030 Will County onSite excavator continues load out of scrap metal ERRS continue frac tank clean up.

* Back log 1040 Joe the property owner on Site

1044 weather drizzling no air monitoring no visible emissions during load out

1100 ERRS halfway done with frac tank

1126 meeting with County Rep Tom Casey go over plans. 400 foot water Sample Radius of impacted areas Septic System will be taken care of older homes on wells or find kill zones Schrak Enviro. will handle Sample water TT will take split Sample.

1130 #1 truck offsite

1200 Lunch Break

1231 #2 truck onSite

1301 Cones are marking Septic areas on the property

1324 Air monitoring walk zero detections from multi Rae upwind, downwind crosswind. excavator crushed a water based waxed. moving to different location to prevent Spread

10-22-19

1400 excavator crushing known empty drums

1415 Air monitoring 0.0 ppm

1430 EPA + START went into the Hot Zone to crush Empty Drums highest VOC Hit 4000 PPB

1500 Crew headed off Site

Load total ~~+ pre load ++~~

1 pre load off site + 1 load offsite + 1 reloaded

1600 START + EPA offsite

10-22-19

Rita in the Rain

0700 – START (1) + crew 10-23-19

0730 – fire inspector for insurance onsite START will enter Hot Zone with multi rae while inspector conducts his investigation

0800 preparing to enter Hot Zone

0845 out of Hot Zone non detect on air readings on the multirae. Removal on stand by in the inspection area to get approval to remove forklifts ect.

0915 #1 truck back from scrap yard. on stand down until approval

Weather: partly cloudy high 61°F-40°F SE 5-10 mph Precip. 0%

1046 Turn key onsite to see estimated amount of liquids in the large tanks in the middle of the site

1105 Joe (owner) on site

1112 Adler tank has been removed from the back of the plumber building.

1115 workers scraping west side of the site but fugitive dust is high. will stop and move to different task

1130 hand held Dusttrak set out down wind, while not roaming around. Wortmann crew spending clean sand in clear of debris area on the west side of the site.

Dusttrak ID MPGI-102319_002

1140 Wortmann loading out empty barrels previously mark by EPA + START

1238 removal continues

1304 Air monitoring check

1320 Air monitoring did not indicate any elevated levels of particulates or VOC, H_2S, LEL, O_2, CO

1340 Wortmann crew loaded large holding tank into scrap truck

1410 Air monitor check

1437 No exceedence on monitoring equipment. excavator scraping concrete slab with a building crossbeam.

1451 crew headed out of Hot for the day 1 truck loaded out + 1 preload

1500 crew done for the day START + 1 Stahrak employee waiting EPA for supplies.

1600 EPA + START off site

[signature]

10-24-19

0700 START onsite (Baker) + Schrak + Wortman crew.
weather high 50°F - Low 37°F
Precip 0% wind 3mph NNW
0800 preloaded metal scrap offsite
0831 blue frac tank being taken off site.
0900 operator scrapping impacted sand and spreading more with the skid steer on the north west side. Air monitor (Dust trak) set down wind
0937 truck back onsite
1010 Air monitoring check
1029 crew is preparing to load out the burnt forklift
1100 both forklifts loaded up into the truck.
1124 Dusttrak stopped for unknown reason START changing it
crew will start working East side now that the frac tank has been moved
1151 20 yard box onsite putting the box near the warehouse on the west side
1200 OSC called about the soybean farmer needs direction where

10-24-19

he can harvest
1239 Schrak + START marking the field
Addresses to potentially sample
Kingston + Ferro
493, 481, 473, 461, 455, 443
438 - Kingston + moss
435 - wintree
440 - moss, 2625 moss
440 - Rossford
1328 - meeting with farmer
2517 - moss, 2515, 2511
920 - Sevanne, ~~445 ...~~
End of sample area.
1332 Setting Air monitor again
2nd 20 yard box on site Scrape truck is now being loaded out of the ~~west~~ East side of the property
1420 scrape truck off site 1 preload 2 loaded
1440 excavator stock piling scrap metal
1500 crew done for the day
1530 offsite

Rite in the Rain

10-25-19

0700 START (Baker) EPA Paul R.
Schrak + crew onsite
0800 Enviro serve onsite for container
+ drum identification + sampling
weather high 52°F low 34°F partly cloudy
precip 0% wind 0-5MPH NNE
preloaded truck off site for
first load
0805 excavator moving graphite into
poly lined dumpsters Enviro
has 1 PM + 2 Techs
0824 Enviro Safe entering hot zone (2)
0833 Setting out hand held dust track
0900 EnviroServe laying poly on
the east side to run hose
for pumping tanks
0930 Turn Key onsite to pump out
various large tanks
1000 Sample was taken from 20yrd
box for characterization
1020 no exceedence noted
1041 Enviro Serve marking empty
drums
1055 Scrape truck 2 being loaded
with big box

10-25-19

1119 Yang Ming box being picked up
1137 3 large tanks confirmed water/empty
knocked over + crushed for loading
1200 - Break
1230 - back on site
1315 - Enviro Serve + TurnKey emptying
medium size containers that have
"oil" liquid
1315 - moving air monitoring
hand held dust track out of battery
1336 - no elevated levels on PID or
dust track
1426 Scrap truck #3 out
1444 stopping vac truck with the
holding tank on the north side
product is too thick
Wortmann excavator spreading sand
to cover any liquids spilled so nothing
migrates off the concrete area
1600 All personnel off site

10.25.19
[signature]

10-28-19

0700 START (Baker) OSC (Ruesch)
Wortmann crew, Schrak crew
0730 H&S meeting & plan of the day.
Due to rain a vac truck will be onsite to pump water from the site.
☆ weather: partly cloudy w/precip high 53°F low 38°F winds 5-10 mph
0800 crew loading up truck for the first day load. Enviro Serve looking @ drums "E" Empty "X" full "XP" full pumpable.
0836 11 total loads for scrap metal have been taken out. Enviroserve has entered Hot Zone
0900 Air monitoring equipment setting @ Point 2
0948 20,000 ppb reading while drum marking. No drums were opened explanations - spray paint
0950 Vac truck onsite to remove standing water
1040 Enviro Serve continue with drum identification. Scrap truck offsite & getting "Low boy" permit for large vats/containers

10-28-19

1047 workers testing viscosity of liquid in drums that can be opened in the northwest side.
1102 Turnkey water truck finishing up
2nd Turn key vac truck onsite
No exceedences from perimeter of site from air monitoring equipment. Enviro Serve taking lunch. Wortmann crew will continue drum & scrap ~~cons. dattan~~ consol. dattan
1113 Schrak enviro putting boom around man ~~whor~~ hole on the North ~~west~~ east side
1142 Turn Key truck #2 finished pumping water from drainage ditch & boom has been replaced.
1217 Wortman crew with sand load START switching multi gases due to battery.
1245 Enviro Serve on Break
1300 back in Hot Zone TT back in for air monitoring only H&S due to spray paint
Turn Key is prepping to start pumping from marked drums & warehouse oil drums. Wortman is using bobcat to make a sand road on the ~~North~~ South east side.

10-28-19

1314 Air monitor check with pumping No exceedences

1324 START pulled air monitors due to vac tank exhaust & Batteries on equipment

1336 Wortman Sand truck #2 onsite

1400 Vac truck shut down by PID due to smoke being produced

1400 Enviro taking break

1415 Suting back up START headed in Hot zone

Enviro Serve drum count

full	Empty	Potential Amount
33	48	11

1430 Enviro done for the day Enserve (insulation) onsite

1435 START pulling monitors

1440 Wortman Scrap truck #2 onsite for preload

1500 All work complete Schrak crew offsite. START EPA doing other site activities

1630 Offsite

6-28-19

10-29-19

0700 - START (Baker) EPA (Reusch) Schrak (2), Wortmann

Weather high 44°F Low 34°F wind 0-10 mph North east Light drizzle.

0730 - Enviroserve onsite for drum marking

0800 Wortmann working in North east corner moving empty drums & Scrap

0830 Wortman Scrap #1 offsite total 13 Loads Enviroserve in Hot Zone marking drums.

1000 Enviroserve offsite, excavator Starts marking Scrap Stockpile

1057 Enviroserve onsite again

1120 Wortman Crew Loading Low boy with Large tanks strapping down tank for transport

1130 Enviro serve continue Drum marking

1230 Env. Co Serve off Site excavator moving Large tanks on Low boy

59 Empty, 125 full, 4 Couldn't open Drums total ~288 Drums

1351 excavator working on Stockpile Scrap metal

1430 Schrak & Wortman crew preparing for end of day

Rite in the Rain

10-30-19

0700 START Baker onsite Schrak (3) Wortmann (2)

* weather Rain/Snow 100% Precip wind 5-15 mph NNE high 40°F – 32°F No air monitoring today

0800 H+S meeting move metal + Bring in wood chips. Wortmann crew prepping scrap for load out + waiting for ~~doubt boy~~ scrap truck

0800 Scrap truck being loaded

0804 Small area was eroded + slight water with sheen + Schrak fixed eroded area covered water with sand and added a boom.

0812 taking walk around perimeter for any more breaches. Schrak adding sand barrier to north east side. Will County onsite to check in

0835 #2 truck load onsite

0900 more sheen migrating off site rain water sewer has been boomed off

0930 Wortmann reinforcing Sand Berm

1000 workers are doing preventative work measure to minimize flooded area

1042 Thorn Key Vac truck onsite pump water

1150 Vac truck off site sucked up water in flooded areas.

1210 Wortmann onsite with another ~~scrap~~ truck with mulch 60 yds

1300 mulch is being spread using the bob cat to areas with oil

1335 mulch has been spread throughout site

1400 Schrak checked Soy bean field for any oil release due to flooding on site – None found

10-31-19

* Weather | Low 21°F High 32°F
Wind 12-15 mph NE Snow
flurries - no air monitoring

0700 H+S meeting today remove
the last of the forklifts plus
equipment in the burnt down
warehouse.

0736 Workman crew pumping out
ditch on the North East
side + main area in the site
, NO frac tank must arrived
10/30/19

0800 Workman crew working on
pulling + loading out equipment
in the burnt side of the
warehouse

1000 use truck onsite to pump
out water from frac
tanks.

1100 lunch

1230 putting scrap in truck #2
+ pumping ditch on North
east side

1300 workman crew moving "E"
drums to be loaded out

11-1-19

0700 START (Baker) ERA (Reese) on site with Schrack + workman crew

weather Sunny 0% precip Low 24°F - 43°F Wind South SE 0-10 mph

0800 Load Scrap truck first Then try move drums in Northeast side. workmans will try to get a load of wood chips

0830 workman crew moving drums in the north east side to the North west side.

0930 Workmans Scrapping up any debris left over + making a pile

1030 workers are emptying sleeved bucket on the large tank with 5 gallon buckets into a drum

1154 Saw truck has arrived on site

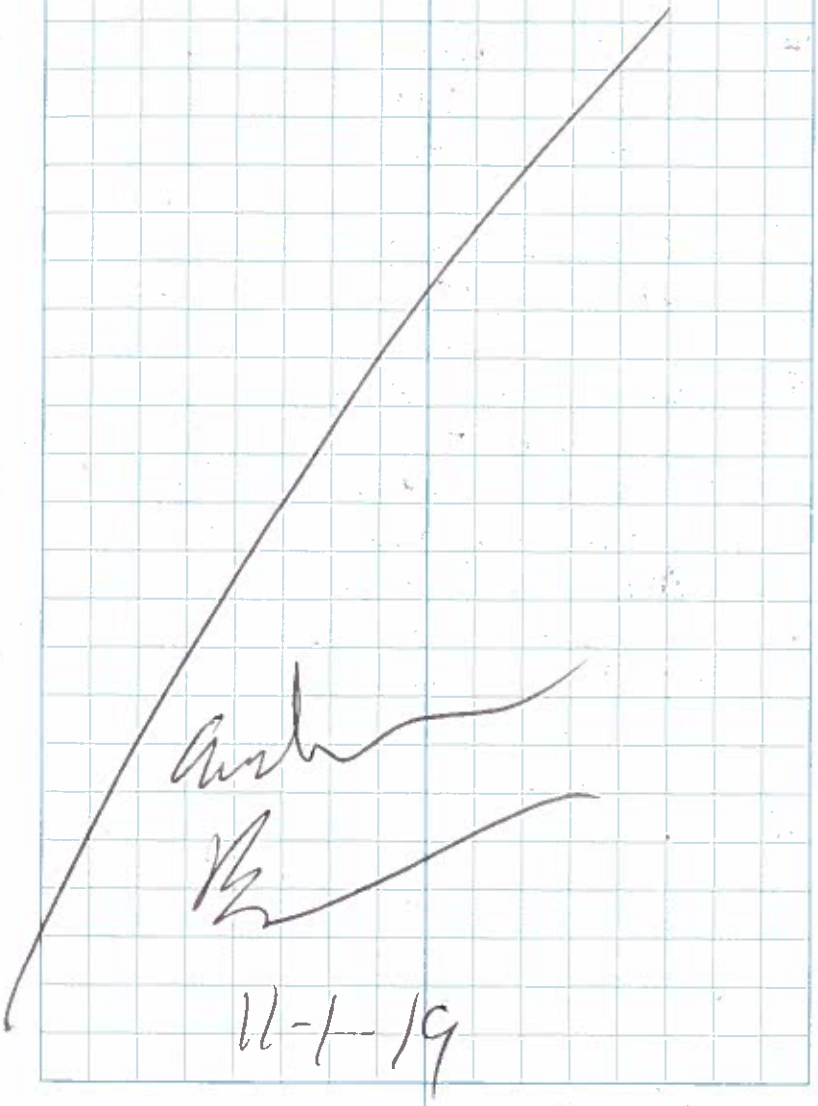
1330 excavator moving saw to shave up the berm on the north east side of the site

1400 debris pile covered with Poly

1930 new Load of Saw

11-2-19

1500 prepping site for demob



11-1-19

Joliet Chem Fire 11/04/19

0700 START B. Martin and EPA OSC Paul R. on site, weather: 47°F, partly cloudy, wind direction ~~ESE~~ ENE at 8 mph. START calibrated "OS-RAE 014", all sensors passed, zero cabed "OS-HDMx 03"

0810 START conducted air check of perimeter (EZ), no VOC reading, any particulates = less than 0.050 mg/m³

0830 Go's plan for today: decon rented equipment, swap out rental contractors.

0855 Turnkey vac truck onsite to offload water from tank

0935 Turnkey trucks offsite, 3500 gal of non haz contaminated water shipped to Water Integrated Treatment Systems LLC, 6364650.

0947 START conducted perimeter air check, VOC= 0 ppb, particulates = 0 - 0.3 mg/m³. Rented equipment is heavy decon.

1130 Work stopped for day, STEL + TWA = 0 for CO and VOCs, peak VOC= 190 ppb, peaks CO = 9 ppm.

1200 START + EPA OSC left site

Brandon M

11/04/19

Joliet Chem Fire 11/05/19

0645 START B. Martin + OSC Paul R. onsite, weather: clear, 35°F, winds direction E at 8 mph. RW Collins on-site

0700 Schrack on-site, H-S meeting w/ new contractors RW Collins.

0714 Truckload of sand arrived onsite, for decon crushing pad. RW Collins unloader excavator.

0748 Ron gave 3 RW Collins crew a more thorough H+S meeting. RW locate has not arrived yet (will stay), plan to work inside grade today until utility locate arrives.

0817 2nd load of sand arrived.

0821 START conducted perimeter air check w/ EPA multi Rae + DustTrak, background levels.

0845 Turnkey onsite, to remove chlorinated drums from building, oil/water material.

0911 Turnkey offsite, unloaded & cleaned oil/water drums (55 gal metal), non-haz, tracking no 90969. RW Collins prepping work area.

1020 START conducted perimeter air check, w/ multi Rae + DustTrak, no hits/elevated levels.

1130 load of trucks dispatched at site, Turnkey vac truck offloaded, 700 gal, 102095. Correction, tracking # is 06364658.

1326 START conducted perimeter air check

during drum solidification process. No hits on PID or Dust Trak.

1425 START conducted perimeter air check, no hits.

1450 Schrack, RWC, USEPA offsite

1510 START locked up, left site

[signature]

11/05/19

0647 START arrived onsite, Schrack + RWC onsite. Weather: 36° F, overcast, wind direction NNW 9 mph. Note for yesterday, in pm approx 20 drums solidified, approx 130 remain.

0655 OSC Paul R. onsite

0715 RWC organizing/moving sludge piles.

0828 Brian Cz[illegible]on on site. (Will County EMA)

0845 Brian offsite, 1 load mulch dropped at site, START conducted perimeter air check, w/ PID + Dust Trak, no hits

1115 START, Paul, Ron inspected soybean field.

1235 START returned to site, Turnkey on-site.

1237 Turnkey left site empty, due to viscous material (unable to pump). START conducted perimeter air check, no hits

1300 Drum solidification occurring. Note for yesterday. TWA + STEL was 0 for VOC, CO.

1417 START conducted perimeter air check, no hits. RWC cleaning floors and moving roll-offs to prepare for possible rain tonight.

1500 Schrack + RWC offsite

1511 START + EPA offsite

1512 TWA/STEL = 0 for VOC/CO.

[signature] 11/06/19

0713 START arrival on site w/ EPA Sci Mgmt + Austin. Schulz + RWC on-site. Weather 28°F, partly cloudy, wind direction SSE 10mph

0730 START, Matt, Austin used GPS to delineate area not harvested in soybean field.

0735 START returned to site, utilities currently being marked. RWC expanding/mixing drum solidification pad. START calibrated MultiRae OS-BAE04, all sensors passed.

1038 5 drums remain. Plan is to solidify solid undamaged drums from building next.

~1140 Joe P. (Turnkey) arrived on site, attempting to find buyer for 16 drums of surfactant.

1150 Joe P off site

1155 RWC loading empty tanks onto flatbed for scrap load

1203 START conducted perimeter air check, no hits. Landscaper working on Amherst Ct Cul de sac

1213 RWC driver asked for tanks to be unloaded and dewd before transport, 2 tanks unloaded

1325 START conducted perimeter air check, no hits. Crews started solidifying undamaged drums, 2 employees Bob stopped work, too liquid, wants to explore other options.

1345 Door bag installed on building, RWC is mixing drum solidification pile.

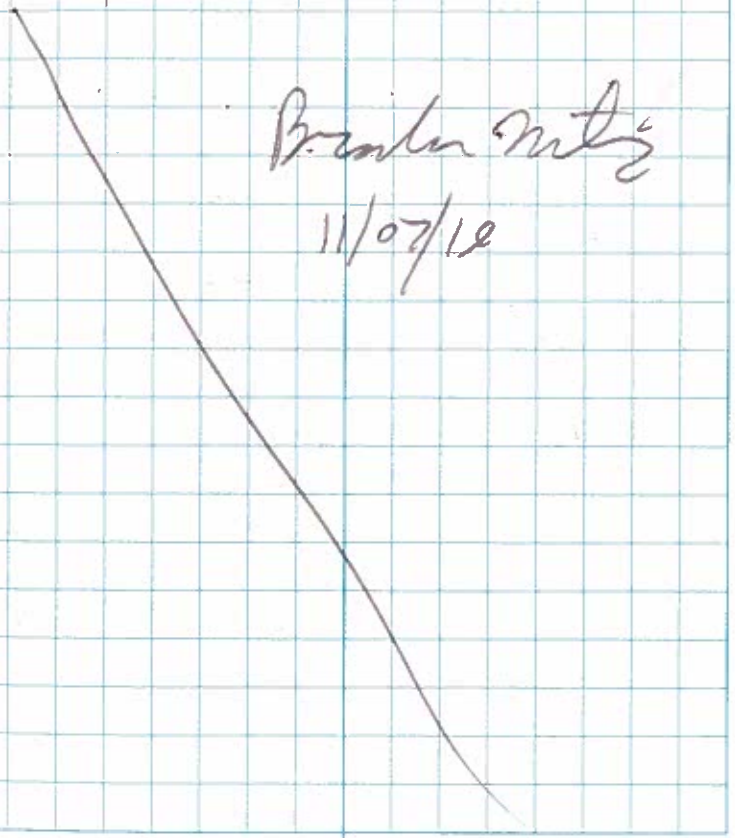
1435 RWC wrapping up work, START conducted perimeter air check, no hits

1447 RWC off site, operator reported pile (drum solidification) is ambient temp

1500 Schulz + door contractor crew off site

1535 EPA Paul R. on site

1600 EPA + START left site



Brandon Metz
11/07/19

Rain in the Rain

0800 START arrived at site. RWC + Schact onsite
RWC turning pile, cleaning 2 tanks. Weather
22°F, mostly clear, wind direction E 3mph.
Plan today, vac out undamaged drums, clean
tanks (possibly scrap), turn pile, sample I80
ROW soil.

0905 START left site to get decon supplies
~~0~~ 1005 START returned to site, Tom from RWC onsite,
Bradly reported state's attorney's office made
a site visit. Bradly gave overview of site.

1013 North Branch Environmental vac truck arrived
onsite to pump undamaged drums. START conducted
air monitoring, meter air range between 0
and 2 ppm.

1110 START + Ron collected I 80 soil aliquots
5 aliquots per sample (composite), ~~5 comp~~
4 comps total.

1205 START processing sample aliquots, vac truck
offsite, pumped 12 drums, 12 remain
(not including surfactants). Note: aliquots
collected to 3in depth w/ hand shovel,
decon'd b/t composites. Process: homogenize
aliquots, add same amount to composite, homogenize
again, collect sample:
MPGI-I80-Soil-01-110819 ~~1320~~ 1310
MPGI-I80-Soil-02-110819 1312

MPGI-I80-Soil-03-110819 1314
MPGI-I80-Soil-04-110819 1316
MPGI-I80-Soil-05-110819 1318
MPGI-RB-01-110819 1320
Notes: "01" is most western composite,
"02" is middle/west composite, "03" is middle/
east composite, "04" is most eastern composite,
"05" is duplicate of "02". Rinsate collected
~~off~~ of hand shovels used to collect aliquots.

1350 Property owner onsite

1400 Note: 1 load of scrap left site around
11 or 12 (2 tanks), waiting on ticket for
weight. Waiting on manifest for 12 drums
vaced out. Plan for next week:
solidify remaining 12 drums, start loading
out soil/oil/sludge.

1440 Vac load info: 660 gallons disposed at
at WIT, manifest # 21034730.

1450 Schacts + RWC leaving site.

1500 START locked up + left site

[signature]
11/08/19

Rite in the Rain

0650 START arrived onsite, Starcrk + RWC onsite. weather: 27°F, snowy, wind direction SSE 18 mph. START calibrated MultiRae "05-RAE-014", all sensors passed. Plan for today: begin offloading soil/sludge piles to Landfill, starting w/ S pile. Plan to transport 2 full rolloffs covered.

0705 START conducted perimeter air check, no hits. RWC began loading truck #1 from S pile. 4 trucks onsite.

0725 Truck load 1 left MPG-005

0738 Truck load 2 left MPG-006

0750 Truck load 3 left MPG-007

0805 Truck load 4 left MPG-008

0839 Truck load 5 left ~~MPG-007~~ 005(2)

0904 Viper truck 206 returned to site and left empty, stopping for day.

0908 Truck load 6 left site, MPG-~~010~~ 008(2)

0926 Truck load 7 left site, MPG-007(2)

09~~4~~5 START conducted perimeter air check, no hits

0950 Truck load 8 left site, MPG 005(3)

1003 Truck load 9 left site, MPG 009

1010 Frac tank left site

1032 Truck load 10 left site, MPG 008(3)

1039 Truck load 11 left site, MPG 007(3)

1102 Truck load 12 left, MPG 005(4)

1117 Rolloff left site for laboratory

1122 Truckload #13 left, MPG-009(2)

1134 Truckload #14 left, MPG-008(3)

1141 Truckload #15 left, MPG-007(4)

1159 Truckload #16 left, MPG-~~010~~ 011

1233 Truckload #17 left, MPG-009(3)

1242 Truckload #18 left, MPG-012

1251 Truckload #19 left, MPG-014

1252 Rolloff #2 left, MPG-013

1302 Truckload #~~18~~ 20 left, MPG-011(2)

1314 START conducted perimeter air quality check, no hits. Soil/moisture piles are offsite, no more loads for today.

1348 Truckload #21 left, MPG-009(4)

1416 ~~Truckload~~ RWC truck ~~76~~ left site w/ load of scrap. correction 77

1420 Note: 12 empty drums were crushed today and sent w/ soil moisture (RCRA empty)

1424 RWC truck 76 left site w/ load of scrap. No scrap left on site.

1459 START left site, RWC + Schrock packing up for day, leaving soon

Brandon Mertz

11/11/19

Rite in the Rain

Joliet Chem Fire 11/12/19:

0645 START arrived onsite, Schrack + RWC onsite. Weather: 9°F, clear wind direction: SE at 8 MPH. Plan for today: solidify 12 drums, cut up totes, no scraping today.

~~0735~~

0735 RWC Truck #76 unload a load of woodchips for chem solidification.

0800 RWC began solidifying remaining 12 chem waste drums, and 2 partial totes.

1030 Schrack + START investigated chem remains in storage building. Andy joined START conducted air monitoring no hits.

1035 START conducted inventory:

- MacAdet 40-K = 23 drums (5 unmarked)
- Formaldehyde based preservative = 2 drums
  - ↳ not labeled
- 1 concrete release agent = 1 drum (not labeled)
- 1 cleaner = 1 drum (not labeled)
- 2 utility soaps = 2 drums (not labeled)
- 1 unknown blue drum = 1 drum
- 1 Rhodafac RS410 = 1 drum
- 1 NINOL 40-CO = 1 drum
- 1 STEPAN PEARL 2 = 1 drum
- 1 AMONYX 100 = 1 drum
- 1 STEOL CS-460 = 1 drum
- 1 CMC 12M31P = 1 drum
- Partial of dry goods + small containers:

Joliet Chem Fire 11/12/19

Partial:
- 2 bags of sodium chloride
- 4 bags Aquaton CMC
- 1 Merquat 550
- 1 Alpha 103-A10
- 1 D+C yellow #8

= Total drums = 36

1131 Schrack + START + RWC conducted site walk to plan future work, soil scraping. RWC began consolidating waste + scrap metal, removing small burned trees.

1318 RWC, Schrack, START off site

Brandon Martin 11/12/19

0640 START arrived onsite. Schrack + RLC onsite. Weather: 14° F, partly cloudy, wind direction N at 14 mph. Bon led H+S meeting, plan to cut up plastic totes then start scraping soil.

0730 RWC began cutting plastic totes

0900 START conducted perimeter air check, no hits.

0926 RWC completed cutting plastic totes

0955 RWC began digging ditch ~~.~~ N of pad, digging to 1 ft depth.

1011 Note: Andy (MPGD) onsite around 0930

1055 RWC reported water coming into excavated area from under concrete pad, plan to dig sumps every 20 ft to collect water.

1100 START inspected excavation. At least 6 inches of water w/ oily sheen collecting on western side of excavation, no VOC readings. Bon instructed RWC to conduct surface scrape rather than 1 ft excavation.

1122 Andy indicated that the 2 drums of formaldehyde-based preservative is Dantoguard. TurnKey employee onsite to inspect drums

1143 TurnKey offsite.

1315 START conducted perimeter air check, no hits. START inspected scraping progress, visually contaminated soil remains on edge of

concrete pad (after scrape)

1415 Crews covering pile w/ poly for night, cleaning up work area

1445 START, RWC, Schrack offsite

[signature]

11/13/19

Joliet Chem Fire 11/14/18

0655 START arrived on site, RWC + Schrack on site, 4 trucks on site, RWC preparing to load contaminated soil. Weather: ~~29~~ °F, partly cloudy, wind direction E 4mph

0700 Trucks on site:
- 54 Flores - MPG-015
- 486 Flores - MPG-016
- 2 BAS Trucking - MPG-017
- 18 495 Flores - MPG-018

0714 486 Flores/MPG-016 ~~left~~ load left

0723 54 Flores/MPG-015 load left

0730 2 BAS Trucking/MPG-017 load left

0741 495 Flores - MPG-018 load left

0820 RWC 26/MPG-019 load left

0825 START conducted perimeter air check w/ PID + Draeger tubes, no hits

0832 RWC begins to excavate area N of pad, approx 25 ft from NE corner.

0910 START conducted air check, no hits.

0919 RWC 76/MPG-019(2) load left

0951 Ruben Ochoa on site to fix gauge doors and provide guard to take down damaged part of building.

1018 RWC 76/MPG-019(3) load left

1105 OSL Jacob Hussen on-site

1115 RWC 76/MPG-019(4) load left

Joliet Chem Fire 11/14/18 41

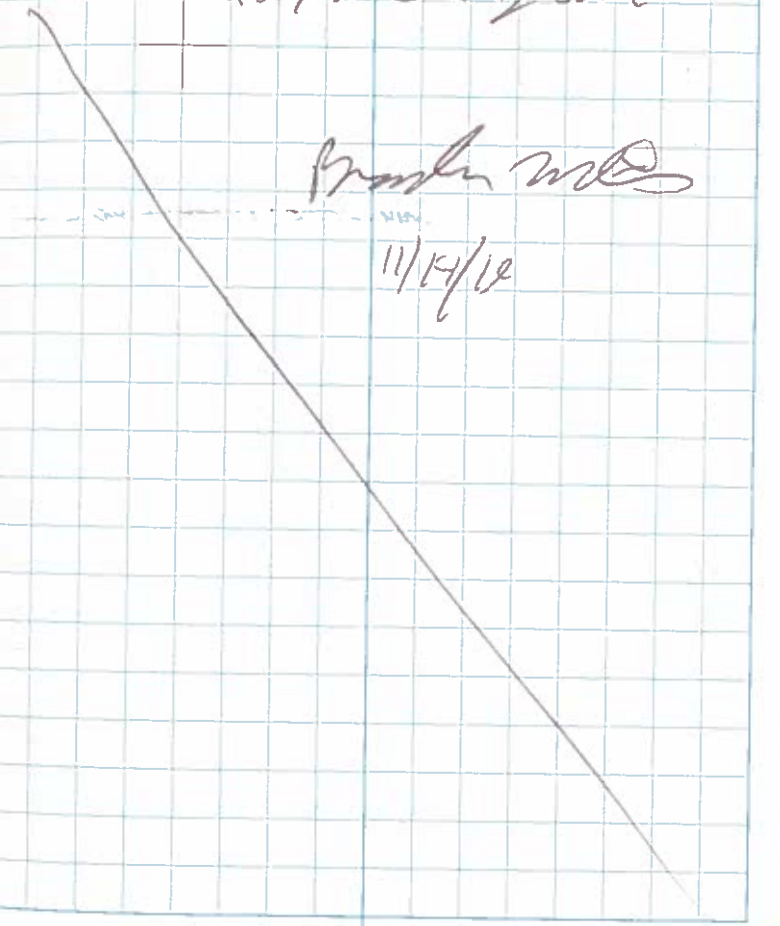
1205 J. Hussen left site after tour w/ Ron + START. No hits on VOCs or dust.

1215 RWC 76/MPG-020 load left site

1312 RWC 76/MPG-020(2) load left site

1322 Schrack off site

1325 START off site, RWC leaving soon



11/14/18

Joliet Chem Fire 11/15/19

0645 START on site, Schrack + RWC onsite weather: 22°F, clear, wind direction E 3mph.

0650 OSC Paul R. onsite.

0719 North Branch Envir vac truck onsite, to pump from A + E perimeter areas.

0835 START collected composite sample aliquots from I80 ditch, #5, 5 points, dice, 3 inch depth, as other I80 samples collected. New composite is directly east of previous composite #4.

0811 Viper/MPG-021 load left site

1000 START sampled #5 composite, Sample ID MPGI-I80-Soil-06-111519, 2 8oz glass.

1030 START + Paul handed out flyers and graduated. signify letters

1234 - Note: at 1015 VIPER MPG-021(2), at 1132 VIPER MPG-021(3) load left, at 1145 North Branch vac truck left w/ 350 gallons, tracking

1252 VIPER MPG-021(4) load left

1358 VIPER MPG-022 load left

1400 Note: Tom Kasic on site, stated we need to remove underground tanks. RWC scraped eastern perimeter.

1440 START, EPA, RWC, Schrack off site

Joliet Chem Fire 11/18/19

0645 START arrived onsite, Schrack on-site, weather: 35°F, cloudy, wind direction ESE at 3 mph. START calibrated 05-RAE014, all sensors passed.

0655 RWC, ~~START~~ EPA Paul R. onsite

0700 Notes: Friday (11/15) security no longer onsite, Tom Kasey stopped by site, wants Schrack to remove septic

0722 RWC #77/MPG-023 left site

0730 START conducted perimeter air check + Multi Phase + Dust Track, no hits.

0750 RWC #76 dropped load of stone

0840 RWC #76 dropped 2nd load of stone

0845 RWC began excavating soil in Rexid Plumbing drive

0923 RWC #77/MPG-023(2) left site

0945 RWC #76 dropped 3rd load of stone

1014 RWC #77/MPG-023(2) left site, previous note at 0923 was a mistake

1018 RWC #76 dropped 4th load of stone

1139 5th load of stone arrived

1145 RWC #77/MPG-023(3) left site

1150 Note, at 1100 START collected soil samples on either side of [redacted] drainage, MPGI-PP-Soil-01-111819 collected

Rite in the Rain

Joliet Chem Fire 11/18/19

on west bank of drainage swale MPGI-PP-Soil-02-111819 collected on east side of drainage (bank)

1237 6th load of stone arrived at site

1255 RWC 77/MPG-023(4) load left

1320 7th load of stone arrived at site

1345 Non-Haz load of water left site,

~~1400~~ North Branch Burn, 875 gal

1400 Note: access agreements (well water sample) received by 435 Wintree Ln, and 20607 Amherst Ct.

1417 RWC 77/MPG-024 load left

1440 START offsite, ELA left around 1300, Schrader RWC wrapping up for day, Laura by 1500

Brandon Martin

1/18/19

11/19/19 Joliet Chem Fire

0655 START (Knox) onsite — KK

Weather 36°F, high 42°, cloudy, snow/rain predicted, wind ESE 6mph

0700 OSC Ruesch + PRP contractor Schrader onsite already, tailgate meeting

0705 Site Walk with OSC Ruesch

0710 SECI will remove sand berm from south border of concrete pad

0730 Calibrate MultiRAE ~~0144~~ 05-014

Multi Sensor Span - All pass

Single Sensor Span - Pass

Fresh Air + All Pass

0734 RW Collins 076 Truck onsite ~~MPG-023~~ on site with stone, dump in ~~NE~~ KK ditch at NE corner of concrete pad

0737 Rain begins — KK

0738 RWC 077-MPG 23 onsite ~~w/ stone~~ KK for load out of soil pile south of concrete pad — KK

0740 RWC 076 offsite — KK

0748 RWC 077 offsite — KK

0755 SECI Scraping + stockpiling soil with excavator for load out — KK

0805 Excavator spread rock in NE ditch

0816 RWC 076(2) on site w/ stone — KK

Rite in the Rain

11/19/19 Joliet Chemical Fire

0824 RWC 076 (2) offsite —— KK
0910 RWC 077 (2) offsite w/ load of soil, RWC 076 (3) onsite with ~~rocket~~ stone —— KK
0915 RWC 076 (3) offsite; Break —— KK
0930 Excavator continue stockpiling
0945 Joe's Well + Pump onsite
0952 RWC 076 (4) onsite w/ stone
0957 RWC 076 (4) offsite —— KK
1012 RWC 077 (3) onsite for load out
1014 Light rain continues, no air monitoring
1022 RWC 077 (3) offsite w/ soil load
1025 Well is 150 feet deep, Joe's well + pump will pump ~~+ plug~~ KK west well —— KK
1040 OSC Ruesch offsite —— KK
Backlog 1035 RWC 076 (5) onsite w/ load of stone —— KK
1044 Joe's well + pump offsite — KK
1050 Excavator spreading stone in ditch east of concrete pad —— KK
1105 Break for lunch —— KK
1119 Owner on site (mPG) —— KK
1123 Broom attachment for skidsteer onsite
1129 RWC 4x4 KK truck 49 take pdy offsite + RWC 077 (4) onsite for load out

11/19/19 Joliet Chem Fire

1130 Truck RWC 76 (6) onsite w/ stone
1146 RWC 77 (4) offsite w/ soil load
1200 Owner (mPG) offsite excavator begin removing + stockpiling sand berm
1210 Water in well able to be pumped + not ~~contaminated~~ visibly impacted by site runoff, well company will return at later date to sample well, raise well head + cap —— KK
1214 Truck RWC 76 (7) onsite w/ CA-6
1253 Truck RWC 77 (5) onsite for load out of berm sand —— KK
1300 Truck RWC 77 (5) offsite w/ sand load
1345 Truck RWC 76 (8) onsite w/ CA-6
1346 Receive soil tonnage report for 11/18/19: 5 loads, 103.48 tons
1352 Truck RWC 77 (6) onsite —— KK
1402 Truck RWC 77 (6) offsite w/ sand load —— KK
1405 Crew begins wrapping up site, prep sand pile for load out tomorrow + secure —— KK
1415 START offsite

11/19/19

Rite in the Rain

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CONTENTS

PAGE	REFERENCE	DATE

Joliet Chem Fire 11/20/19

0640 START arrived on site. Schrack on site, weather: 38°F, cloudy, wind dir N 2mph.
0700 RWC on site, H+S safety meeting
0727 RWC #77/MPG-027 load left
0815 First load of gravel arrived at site
0839 RWC #77/MPG-027(2) load left
0907 Second load of gravel arrived at site
0915 Ron put in excavator #04993153 to remove ComEd transformers
0946 Third load of gravel arrived at site
0955 RWC #77/MPG-027(3) left site
1030 4th load of gravel arrived at site
1115 5th load of gravel arrived at site
1122 RWC #77/MPG-027(4) left site
1244 6th load of gravel arrived at site
1306 RWC #77/MPG-028 left site
1326 7th load of gravel arrived at site, all soil piles offsite
1405 8th load of gravel arrived at site
1445 START, RWC, Schrack off site

Brandon Metz
11/20/19

Joliet Chem Fire 11/21/19

0655 START arrived at site. Schrack + RWC on site. Weather: rain, 47°F, wind direction NNE 20 mph. Paul Pruesch onsite
0746 First load of gravel arrived at site
1400 Insulation removed from burned section of building. RWC completed the gravel parking lot at MPG, began cooling
1450 START + EBA offsite, locked site

Brandon Metz
11/21/19

4 Joliet Chem Fire 11/22/19

0800 START + Paul R. onsite, no contractors onsite today. START removal fence from neighbors prof.

1005 Andy + Joe (arrive) onsite + insurance inspector.

1030 Andy, Joe, Insurance inspector offsite

1109 Comed onsite to inspect transformers.

1300 START + Paul removed groundwater sampling targets, notes recorded on paper take, photographed for records.

1500 START + Paul offsite

Brandon Mutti

11/22/19

Joliet Chem Fire 11/25/19 5

0700 START arrived onsite w/ EPA Paul R., Schrank, Rick, and Andy. Weather: 36° F, partly cloudy, wind direction NNE 6mph.

0750 ABILITY Septic onsite to flush underground tanks.

0821 Ability began flushing septic, START monitoring w/ EPA PID,

0949 Amer Joe onsite

1215 Ability offsite, no detections w/ PID, Ability operator marked all material in all tanks.

1220 Andy, Joe offsite between 1100 and 1200

1401 Schrank offsite

1435 P. Ruesch offsite

1452 Rick offsite

1505 START locked up and left site

Brandon Mutti

11/25/19

Return on Rem.

Joliet Chem Fire 11/26/19

0700 START, EPA, RWC on-site, weather: 31°F, mostly clear, wind dir SW 2mph.

0735 RWC loading wood into truck for disposal

0849 START, EPA, RWC inspected soybean field.

1010 Propane tanks removed from site

1015 RWC organizing drums in building

1100 RWC offsite

1117 START + EPA offsite

Brandon Martz
11/26/19

Joliet Chem Fire 12/2/19

0650 START B Martz arrived on-site. Schrack onsite, weather = 30°F, partly cloudy, wind dir SSE 11 mph.

0740 START returned from Walmart, EPA Paul R. onsite. START calibrated EPA YSI, sensors calibrated = pH, DO, specific conductance.

0930 START, Paul, Ron, Bradley begin residential well water sampling.

0951 collected VOC/SVOC sample from ID 21, [redacted], see field notes

1038 collected VOC/SVOC sample from ID 20, [redacted], see field notes

1114 collected VOC/SVOC sample from ID 22, [redacted], see field notes

1144 Note Schrack Even collected VOC/SVOC samples at locations, split samples

1244 Collected VOC/SVOC samples from ID 25, [redacted], see field notes

1327 Collected VOC/SVOC samples from ID 24, [redacted], see field notes

1400 START collected field blanks "JCF01-FB-120219" Schrack left site

1505 START left site

Brandon Martz
12/02/19

Joliet Chem Fire 12/3/19

0700 START B. Martin onsite, EPA Paul R. on site, Schrack onsite. Weather: 31°F, mostly clear, wind direction NNE 6 mph.

0710 START calibrated EPA YSI 001 sensors DO, pH, spec cond.

0800 START, EPA, Schrack began potable well water sampling for business near site. See field notes; samples collected:

0817 MPGI-12-Water-RW-120319
0906 MPGI-26-Water-RW-120319
1006 MPGI-13-Water-RW-120319
1008 MPGI-13-Water-RW-120319-D
1100 MPGI-11-Water-RW-120319
1138 MPGI-09-Water-RW-120319

1215 Schrack Env. offsite

1255 START + EPA offsite

Braden Martin
12/3/19

Joliet Chem Fire 12/4/19

0700 START B. Martin onsite, EPA P. Ruesch onsite, Schrack onsite, Geoserve drillers onsite. Weather: 33°F clear, wind direction ESE 9 mph.

0815 EPA Jim V. onsite

0821 P. Ruesch requested that START collect only DRO samples around site (soil), no longer taking VOC, SVOC, Metals. Samples will be co-located w/ Schrack samples.

0826 START collected soil sample "MPGI-North-Soil-01-120419", 0-3 inch discrete from unscraped area directly north of building.

0835 BM START collected soil sample MPGI-North-Soil-02-120419", 0-3 inch discrete from scraped area north of pad.

0840 Note: Samples are being collected to follow Schrack drillers, START sample collection area are 2 inch away from drillers hole.

0845 Schrack collecting samples from foot intervals 0-3, 3-5, 5-7.5, 7.5-10. Screening bags w/ 11-7 lamp, highest screen gets sent to lab.

0905 START collected soil sample "MPGI-North-Soil-03-120419", 0-3 in discrete from scraped area north of pad

0927 START collecting soil sample "MPB1-North-Soil-04-120419" and "MPB1-North-Soil-04-120419-D" as duplicate (time 0929 for dup) from scraped area north of pad

1037 START collecting soil sample "MPB1-East-Soil-06-120419", 0-3 inch discrete sample from east side of pad, extra volume collected for MS/MSD. Location 5 took place on pad, USEPA not interested in sampling.

1105 START collected soil sample MPB1-East-Soil-07-120419", 0-3 inch discrete sample from east side of pad.

1125 START collecting soil sample "MPB1-East-Soil-08-120419", 0-3 inch discrete sample from under driveway, on east side of site. Note previous east samples were from scraped areas

1257 START collecting soil sample "MPB1-East-Soil-09-120419", 0-3 inch discrete sample from under driveway, on east side of site near entrance.

1315 START collected rinsate blank sample "MPB1-RB-120419".

1345 Schrack + Driller offsite

1405 START offsite

Brendan [signature]
12/04/19

0700 START onsite, Schrack and Geoserve onsite. Weather: 28°F, clear, wind direction N at 2 mph. Note Schrack has been drilling to 10 ft depth, plan for today 5 borings + Shelby tube

0748 Geoserve drilling boring #11, #10 was completed yesterday. Both located in gravel South of pad. Ron excluding section of core (12 inches) colored red due to cinder blocks according to Ron

0805 Geoserve drilling boring #12 in area (gravel) South of pad.

0828 Geoserve collected shelby tube from location 6-12 inches South of boring #12. Tube collecting depth 5-7 ft, to be analyzed for physical properties and hydro conductivity.

0915 Geoserve drilling boring #13 in center of pad

0925 GeoServe repeating boring #13 2 feet east of original boring location due to incomplete rec.

0947 GeoServe drilling boring #14 in western part of pad

0954 Geoserve repeating boring #14, 2 feet east of original boring location due to incomplete rec.

1001 Boring #14, 3-5 ft interval being screened with PID = 77 ppm. [initials]

 ~~1015~~ ~~G~~ Joliet Chem Fire. 12/05/19

1015 GeoSolve collected boring #15 from north burned section of remaining building.

1105 Crews done for day, START offsite.

Brooke M[illegible]
12/05/19

Joliet Chem Fire 12/09/19

0730 START B. Martin arrived on site, weather: 45°F, mist and clouds, winds direction NE 9 mph

0840 EPA Paul Ruesch on site

0910 Schrack onsite

1035 Joe (owner) + Andy on site

1105 START + Schrack informed homeowners of water results, notified 21, 22, 24, IDs 20 and 25 not home

1130 START + EPA offsite

Brooke M[illegible]
12/09/19

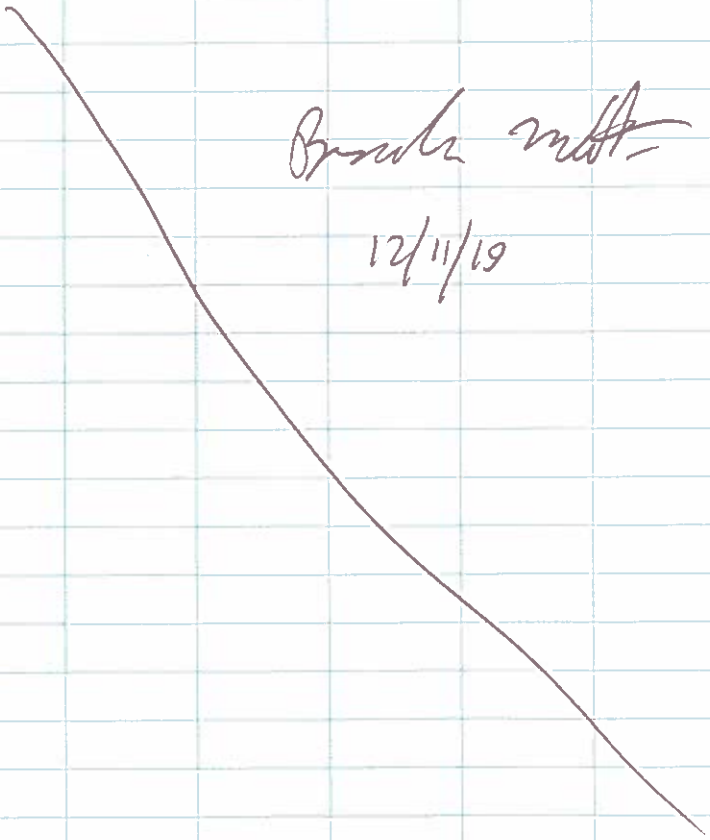
14 Joliet chem Fire 12/11/19

0700 START arrived onsite, Schrack onsite, Weather = 19°F, snowing, wind direction ENE 7mph.

0715 EPA Paul Rivesch onsite

0800 START, EPA, and Schrack removed soft boom from Soybean field

1245 START offsite



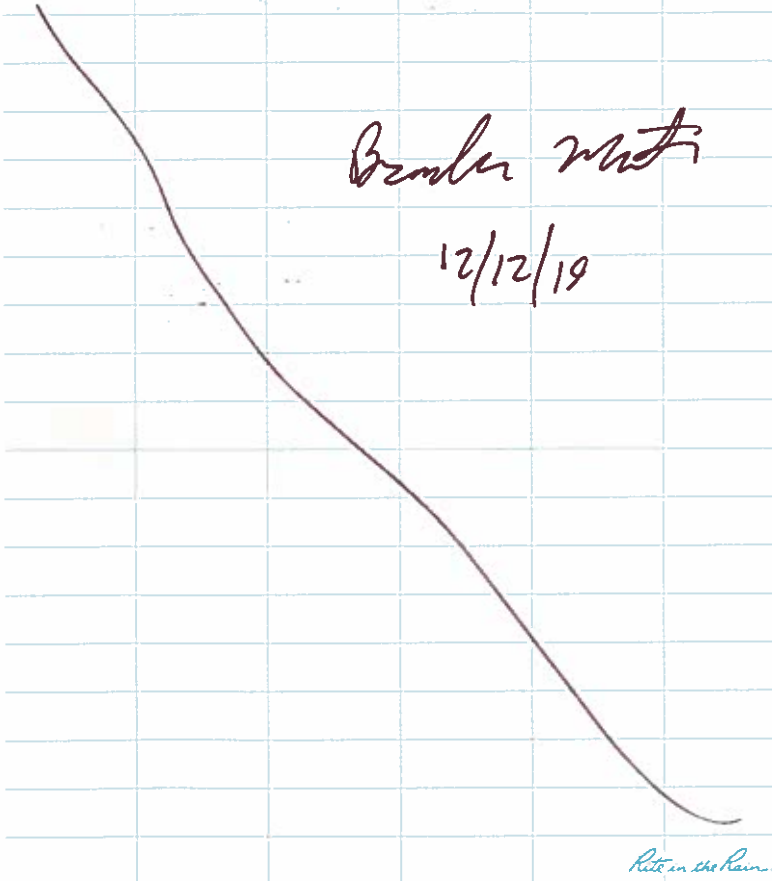
Joliet chem Fire 12/12/19 15

0745 START, EPA P. Rivesch, and Schrack arrived onsite. Weather: 27°F, partly cloudy, wind direction NNW 13 mph.

0835 START, EPA, Schrack marked farm field for scrap area

1345 Schrack offsite

1405 START + EPA left site



16 Joliet Chem Fire 12/16/19

0730 START + EPA P. Rueesch onsite. Weather 28°F, cloudy, winds 0, snow on ground.
0927 START + EPA delivered community water result letters.
1003 START + EPA recon'd farm field
1122 START + EPA returned to site, Schrader + Joe (owner) on site
1235 START + EPA off site

12/16/19

Joliet Chem Fire 12/17/19 17

0645 START arrived on site. EPA P. Rueesch + Schrader onsite. Weather: 19°F, clear, winds: SE (Elr) at 4 mph.
0655 RW Collins on-site. Discussing plan to scrape soybean field today.
0720 RWC began staging equipment at Spreng F.
0805 RWC began scraping ditch starting at highway side working toward houses
0940 START collected soil sample in scraped area, MPG1-SF-Soil-09-121719.
1140 START collected soil sample in scraped ditch, west bank, MPG1-SF-Soil-10A-121719
1144 START collected soil sample in scraped ditch, center channel, MPG1-SF-Soil-10B-121719
1146 START collected soil sample in scraped ditch, east bank, MPG1-SF-Soil-10C-121719
1330 START collected rinsate sample MPG1-RSB-121719
1410 START collected soil sample MPG1-SF-Soil-13A-121719 in homeowner [redacted] backyard as requested by homeowner.
1414 START collected soil sample MPG1-SF-Soil-13B-121719 in [redacted] back yard
1420 13A location: [redacted]
13B location: [redacted]
1630 RWC stopped scraping field.
1630 800 feet completed, 900 ft remain

Joliet Chem Fire 12/17/19

1700 START + EPA left site

Brendan [illegible]

Joliet Chem Fire 12/17/19

0700 START arrived onsite, EPA P Buesch + Schrack onsite. Weather: 16 °F, clear, wind direction SSE 10 mph.

0732 START + EPA, + Schrack met RWC at Soybean entry area.

0803 Load of topsoil dropped at field. ~~Plan on~~ RWC transports soil to flat scraped area near highway.

0827 RWC resumed scraping ditch

1001 START collected sample MPB1-SF-Soil-12-121819 from scraped area.

1120 2nd load of soil dropped at field

1530 3rd load of soil dropped at field

1630 Crews stopped scraping for day

1655 START, EPA, RWC, Schrack offsite

Brendan [illegible]

12/17/19

Joliet Chem Fire 12/19/19

0645 START arrived on site. Safety onsite. Weather: 18°F, clear, NNE 12 mph (dir).

0715 START arrived at soybean field, RWC at field preparing equipment

0803 RWC dropped 1st load of soil

815 RWC cont. scraping top 3-5 inches

1015 2nd load of soil dropped (RWC)

1040 START gave owner tour of the field. Owner had questions about samples, locations (if sufficient), if channel needed to be backfilled, and what would happen if contamination was found later in future. 1st load of contaminated soil left site w/ RWC

1210 1-3 in soil sample collected from west/north bank (left looking downstream), MP61-SF-Soil-14A-121919 at 41.516459 -88.017639.

1212 Collected duplicate sample MP61-SF-Soil-14A-121919-D at same location.

1214 1-3 in soil sample collected from center channel MP61-SF-Soil-14B-121919 at 41.516440 -88.017624

1216 Collected 1-3 in soil sample collected from east/south bank (right looking downstream) MP61-SF-Soil-14C-121919 at 41.516450 -88.017624.

1220 2nd load of soil left site at 1205.

1240 1-3 Soil sample collected at ~~east~~ west/north bank

Joliet Chem Fire 12/19/19

at location #11, MP61-SF-Soil-11A-121919 (left side of bank looking downstream)

1242 1-3 in soil sample collected at center channel location 11, MP61-SF-Soil-11B-121919

1244 1-3 in soil sample collected at east/south bank (right looking downstream) MP61-SF-Soil-11C-121919, location 11.

1310 1-3 in soil sample collected from N bank of location 12, MP61-SF-Soil-12A-121919

1312 1-3 in soil sample collected from S bank of location 12, MP61-SF-Soil-12C-121919, previous sample MP61-SF-Soil-12 reassigned to 12B, (center channel).

1330 3rd load of soil left site w/ RWC

1455 4th load of soil left site w/ RWC

1500 START returned to site.

1515 START left site, RWC preparing to leave field. START shipping samples

Brandon Matt

12/19/19

0646 START arrived at site, Schrack onsite. Weather: 24°F, mostly clear, wind dir NNW 4mph. Note 4 loads that went out yesterday (12/19) were MPG-027 manifest.

0715 START + Schrack arrived at field, RWC preparing equipment.

0816 1st truckload soil left site, MPG-030. Correction, loads left yesterday (12/19) changed to MPG-024.

0831 Schrack collected sample (soil) SBF1 at start location 09, 1-3 inch

0838 Schrack collected soil sample SBF2 at start location 12A, 1-3 inch

0841 Schrack collected soil sample SBF3 at start location 12B, 1-3 inch

0843 Schrack collected soil sample SBF4 at start location 10C 1-3 inch

0851 Schrack sample (soil) SBF5 at start 14A

0853 Schrack sample (soil) SBF6 at start 14B

0856 Schrack sample (soil) SBF7 at start 14C

0902 2nd truckload left MPG-031 (soil)

0907 Schrack sample (soil) SBF8 at start 11A

off logs 0909 Schrack sample (soil) SBF9 at start 11B

0911 Schrack sample (soil) SBF10 at start 11C

0918 Schrack sample (soil) SBF11 at start 12A

0921 Schrack sample (soil) SBF12 at start 12B

0923 Schrack sample (soil) SBF13 at 12C

0930 3rd load of soil left site MPG-030(2)

1015 START returned to site. Owner Joe + Andy, Schrack on site. Andy/Joe plan to give warehouse drums/dry goods to Whyte Gate Inc. in Crete Lake IL

1030 Bradley notified START that the 4th load left the field, MPG-031(2)

1055 5th load left field MPG-030(3)

1130 6th load left field MPG-031(3)

1206 7th load left field MPG-030(4)

1250 START returned to field, 8th load has left field MPG-031(4)

1330 8 9th load of soil left field, MPG-032. Schrack collected soil sample from pile area. RWC cleaning + organizing equipment for demob

1420 START, RWC, Schrack left field

1425 START returned to site, Andy had got the Macaulet bags tipped off, approx 10 drums remain.

1430 START, Andy, Schrack offsite

Brandon Mark
12/20/18

Rite in the Rain

APPENDIX E

WASTE DISPOSAL SUMMARY

E1 – NON-RCRA DEBRIS SOLIDS
E2 – NON-HAZARDOUS CONTAMINATED WATER
E3 – NON-HAZARDOUS OIL/SLUDGE
E4 – NON-HAZARDOUS DRUMS
E5 – SCRAP METAL

Appendix E1 - Waste Disposal Summary - Non-RCRA Debris Solids
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Tracking Mumber	Transporter	Discription	Quantity	Units	Weight	Units	Facitlity	Total	Units
10/14/2019	MPG-001	Action Resources	Non RCRA Debris Crème Solid	25	yards	3.4	Tons	Envirosafe Services of OH Inc.	1095	Yards
10/14/2019	MPG-002	Action Resources	Non RCRA Debris Crème Solid	25	yards	4.57	Tons	Envirosafe Services of OH Inc.	1146.32	Tons
10/16/2019	MPG-003	Action Resources	Non RCRA Debris Crème Solid	20	yards	4	Tons	Envirosafe Services of OH Inc.		
10/21/2019	MPG-004	Action Resources	Non RCRA Debris Crème Solid	25	yards	6.25	Tons	Envirosafe Services of OH Inc.		
11/11/2019	MPG-005	Viper Trucking	Non RCRA Debris Solid	15	yards	10.2	Tons	Laraway Landfill		
11/11/2019	MPG-006	Viper Trucking	Non RCRA Debris Solid	15	yards	12.71	Tons	Laraway Landfill		
11/11/2019	MPG-007	RW Collins	Non RCRA Debris Solid	15	yards	13.64	Tons	Laraway Landfill		
11/11/2019	MPG-008	RW Collins	Non RCRA Debris Solid	15	yards	11.93	Tons	Laraway Landfill		
11/11/2019	MPG-005 (2)	Viper Trucking	Non RCRA Debris Solid	15	yards	18.07	Tons	Laraway Landfill		
11/11/2019	MPG-008 (2)	RW Collins	Non RCRA Debris Solid	15	yards	20.53	Tons	Laraway Landfill		
11/11/2019	MPG-007 (2)	RW Collins	Non RCRA Debris Solid	15	yards	21.64	Tons	Laraway Landfill		
11/11/2019	MPG-005 (3)	Viper Trucking	Non RCRA Debris Solid	15	yards	14.92	Tons	Laraway Landfill		
11/11/2019	MPG-009	Viper Trucking	Non RCRA Debris Solid	15	yards	13.56	Tons	Laraway Landfill		
11/11/2019	MPG-008 (3)	RW Collins	Non RCRA Debris Solid	15	yards	11.58	Tons	Laraway Landfill		
11/11/2019	MPG-007 (3)	RW Collins	Non RCRA Debris Solid	15	yards	11.85	Tons	Laraway Landfill		
11/11/2019	MPG-005 (4)	Viper Trucking	Non RCRA Debris Solid	15	yards	13.37	Tons	Laraway Landfill		
11/11/2019	MPG-010	Homewood Disposal	Non RCRA Debris Solid	20	yards	13.02	Tons	Laraway Landfill		
11/11/2019	MPG-009 (2)	Viper Trucking	Non RCRA Debris Solid	15	yards	11.91	Tons	Laraway Landfill		
11/11/2019	MPG-008 (4)	RW Collins	Non RCRA Debris Solid	15	yards	12.51	Tons	Laraway Landfill		
11/11/2019	MPG-007 (4)	RW Collins	Non RCRA Debris Solid	15	yards	13.37	Tons	Laraway Landfill		
11/11/2019	MPG-011	Viper Trucking	Non RCRA Debris Solid	15	yards	14.82	Tons	Laraway Landfill		
11/11/2019	MPG-009 (3)	Viper Trucking	Non RCRA Debris Solid	15	yards	13.84	Tons	Laraway Landfill		
11/11/2019	MPG-012	RW Collins	Non RCRA Debris Solid	15	yards	13.76	Tons	Laraway Landfill		
11/11/2019	MPG-014	RW Collins	Non RCRA Debris Solid	15	yards	14.77	Tons	Laraway Landfill		
11/11/2019	MPG-013	Homewood Disposal	Non RCRA Debris Solid	20	yards	10.68	Tons	Laraway Landfill		
11/11/2019	MPG-011 (2)	Viper Trucking	Non RCRA Debris Solid	15	yards	14.33	Tons	Laraway Landfill		
11/11/2019	MPG-009 (4)	Viper Trucking	Non RCRA Debris Solid	15	yards	9.7	Tons	Laraway Landfill		
11/14/2019	MPG-015	Flores	Non RCRA Debris Solid	15	yards	18.26	Tons	Laraway Landfill		
11/14/2019	MPG-016	Flores	Non RCRA Debris Solid	15	yards	18.29	Tons	Laraway Landfill		
11/14/2019	MPG-017	8AS Trucking	Non RCRA Debris Solid	15	yards	19.42	Tons	Laraway Landfill		
11/14/2019	MPG-018	Flores	Non RCRA Debris Solid	15	yards	18.99	Tons	Laraway Landfill		
11/14/2019	MPG-019	RW Collins	Non RCRA Debris Solid	15	yards	17.94	Tons	Laraway Landfill		
11/14/2019	MPG-019 (2)	RW Collins	Non RCRA Debris Solid	15	yards	15.81	Tons	Laraway Landfill		
11/14/2019	MPG-019 (3)	RW Collins	Non RCRA Debris Solid	15	yards	19.95	Tons	Laraway Landfill		
11/14/2019	MPG-019 (4)	RW Collins	Non RCRA Debris Solid	15	yards	20.89	Tons	Laraway Landfill		
11/14/2019	MPG-020	RW Collins	Non RCRA Debris Solid	15	yards	20.19	Tons	Laraway Landfill		
11/14/2019	MPG-020 (2)	RW Collins	Non RCRA Debris Solid	15	yards	21.18	Tons	Laraway Landfill		
11/15/2019	MPG-021	Viper Trucking	Non RCRA Debris Solid	15	yards	16.82	Tons	Laraway Landfill		
11/15/2019	MPG-021 (2)	Viper Trucking	Non RCRA Debris Solid	15	yards	18.31	Tons	Laraway Landfill		
11/15/2019	MPG-021 (3)	Viper Trucking	Non RCRA Debris Solid	15	yards	17.47	Tons	Laraway Landfill		
11/15/2019	MPG-021 (4)	Viper Trucking	Non RCRA Debris Solid	15	yards	18.27	Tons	Laraway Landfill		
11/15/2019	MPG-022	Viper Trucking	Non RCRA Debris Solid	15	yards	21.27	Tons	Laraway Landfill		
11/18/2019	MPG-023	RW Collins	Non RCRA Debris Solid	15	yards	21.79	Tons	Laraway Landfill		
11/18/2019	MPG-023 (2)	RW Collins	Non RCRA Debris Solid	15	yards	19.45	Tons	Laraway Landfill		
11/18/2019	MPG-023 (3)	RW Collins	Non RCRA Debris Solid	15	yards	24.95	Tons	Laraway Landfill		
11/18/2019	MPG-023 (4)	RW Collins	Non RCRA Debris Solid	15	yards	17.76	Tons	Laraway Landfill		
11/18/2019	MPG-024	RW Collins	Non RCRA Debris Solid	15	yards	19.53	Tons	Laraway Landfill		
11/19/2019	MPG-025	RW Collins	Non RCRA Debris Solid	15	yards	16.84	Tons	Laraway Landfill		
11/19/2019	MPG-025 (2)	RW Collins	Non RCRA Debris Solid	15	yards	18.16	Tons	Laraway Landfill		
11/19/2019	MPG-025 (3)	RW Collins	Non RCRA Debris Solid	15	yards	19.38	Tons	Laraway Landfill		
11/19/2019	MPG-025 (4)	RW Collins	Non RCRA Debris Solid	15	yards	21.15	Tons	Laraway Landfill		
11/19/2019	MPG-026	RW Collins	Non RCRA Debris Solid	15	yards	18.52	Tons	Laraway Landfill		
11/19/2019	MPG-026 (2)	RW Collins	Non RCRA Debris Solid	15	yards	19.87	Tons	Laraway Landfill		
11/20/2019	MPG-027	RW Collins	Non RCRA Debris Solid	15	yards	21.86	Tons	Laraway Landfill		
11/20/2019	MPG-027 (2)	RW Collins	Non RCRA Debris Solid	15	yards	19.29	Tons	Laraway Landfill		
11/20/2019	MPG-027 (3)	RW Collins	Non RCRA Debris Solid	15	yards	19.43	Tons	Laraway Landfill		
11/20/2019	MPG-027 (4)	RW Collins	Non RCRA Debris Solid	15	yards	21.69	Tons	Laraway Landfill		
11/20/2019	MPG-028	RW Collins	Non RCRA Debris Solid	15	yards	13.18	Tons	Laraway Landfill		
12/19/2019	MPG-029	RW Collins	Non RCRA Debris Solid	15	yards	64.94	Tons	Laraway Landfill		
12/19/2019	MPG-029 (2)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/19/2019	MPG-029 (3)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/19/2019	MPG-029 (4)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-030	RW Collins	Non RCRA Debris Solid	15	yards	150.54	Tons	Laraway Landfill		
12/20/2019	MPG-030 (2)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-030 (3)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-030 (4)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-031	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-031 (2)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-031 (3)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		
12/20/2019	MPG-031 (4)	RW Collins	Non RCRA Debris Solid	15	yards			Laraway Landfill		

Appendix E2 - Waste Disposal Summary - Non-Hazardous Contaminated Water
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Tracking Number	Transporter	Discription	Quantity	Units	Facitlity	Totals	Units
10/14/2019	6365133	Turn-Key Environmental	Non-Haz Contaminated Water	5900	Gallons	Water Integrated Treatment System LLC	60945	Gallons
10/14/2019	6365134	Turn-Key Environmental	Non-Haz Contaminated Water	5900	Gallons	Water Integrated Treatment System LLC		
10/15/2019	6365139	Turn-Key Environmental	Non-Haz Contaminated Water	5900	Gallons	Water Integrated Treatment System LLC		
10/15/2019	6365140	Turn-Key Environmental	Non-Haz Contaminated Water	6000	Gallons	Water Integrated Treatment System LLC		
10/21/2019	6365152	Turn-Key Environmental	Non-Haz Contaminated Water	5900	Gallons	Water Integrated Treatment System LLC		
10/21/2019	6365153	Turn-Key Environmental	Non-Haz Contaminated Water	1600	Gallons	Water Integrated Treatment System LLC		
10/22/2019	6241997	Turn-Key Environmental	Non-Haz Contaminated Water	600	Gallons	Water Integrated Treatment System LLC		
10/25/2019	6364594	Turn-Key Environmental	Non-Haz Contaminated Water	400	Gallons	Water Integrated Treatment System LLC		
10/28/2019	6365137	Turn-Key Environmental	Non-Haz Contaminated Water	5120	Gallons	Water Integrated Treatment System LLC		
10/28/2019	6365138	Turn-Key Environmental	Non-Haz Contaminated Water	1500	Gallons	Water Integrated Treatment System LLC		
10/30/2019	6365039	Turn-Key Environmental	Non-Haz Contaminated Water	3000	Gallons	Water Integrated Treatment System LLC		
10/31/2019	6364624	Turn-Key Environmental	Non-Haz Contaminated Water	4000	Gallons	Water Integrated Treatment System LLC		
10/31/2019	6364586	Turn-Key Environmental	Non-Haz Contaminated Water	4000	Gallons	Water Integrated Treatment System LLC		
11/4/2019	6364650	Turn-Key Environmental	Non-Haz Contaminated Water	3500	Gallons	Water Integrated Treatment System LLC		
11/5/2019	6364658	Turn-Key Environmental	Non-Haz Contaminated Water	700	Gallons	Water Integrated Treatment System LLC		
11/15/2019	122656	North Branch Environmental	Non-Haz Contaminated Water	350	Gallons	Water Integrated Treatment System LLC		
11/18/2019	20621756	North Branch Environmental	Non-Haz Contaminated Water	575	Gallons	Water Integrated Treatment System LLC		
11/25/2019	--	Ability Septic	Non-Haz Contaminated Water	6000	Gallons	Water Integrated Treatment System LLC		

Notes
-- - Not avaliable

Appendix E3 - Waste Disposal Summary - Non-Hazardous Oil/Sludge
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Tracking Number	Transporter	Discription	Quantity	Units	Facitlity	Total	Units
10/16/2019	90346	Turn-Key Environmental	Non-Haz Oil	1900	Gallons	Water Integrated Treatment System LLC	4260	Gallons
10/21/2019	6365153	Turn-Key Environmental	Non-Haz Contaminated Sludge	400	Gallons	Water Integrated Treatment System LLC		
10/25/2019	6364594	Turn-Key Environmental	Non-Haz Contaminated Sludge	1300	Gallons	Water Integrated Treatment System LLC		
11/8/2019	21034730	North Branch Environmental	Non-Haz Contaminated Sludge	660	Gallons	Water Integrated Treatment System LLC		

Appendix E4 - Waste Disposal Summary - Non-Hazardous Drums
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Tracking number	Transporter	Discription	Quantity	Units	Facitlity	Total	Units
11/5/2019	90969	Turn-Key Environmental	Non-Haz Oil Drums	9	Drums	--	40	Drums
12/20/2019	--	Whyte Gate Inc.	Non-Haz Detergent Drums	31	Drums	NA		

Notes
-- - Not avaliable
NA - Not applicable

Appendix E5 - Waste Disposal Summary - Scrap Metal
Joliet Chemical Fire PRP Cleanup, New Lenox Township, Will County, Illinois

Date	Load #	Weight	units	Total	unit
10/22/2019	1	5.24	Tons	95.45	Tons
10/22/2019	2	4.99	Tons		
10/23/2019	3	5.77	Tons		
10/24/2019	4	3.95	Tons		
10/24/2019	5	11.19	Tons		
10/24/2019	6	2.08	Tons		
10/25/2019	7	3.62	Tons		
10/25/2019	8	1.68	Tons		
10/28/2019	9	5.07	Tons		
10/28/2019	10	7.85	Tons		
10/28/2019	11	2.14	Tons		
10/28/2019	12	4.42	Tons		
10/29/2019	13				
10/29/2019	14				
10/29/2019	15				
10/30/2019	16				
10/30/2019	17	28.8	Tons		
10/31/2019	18				
10/31/2019	19				
10/31/2019	20				
11/1/2019	21				
11/8/2019	22	2.77	Tons		
11/11/2019	23	2.87	Tons		
11/11/2019	24	3.01	Tons		

APPENDIX F
ENVIRONMENTALLY PREFERRED PRACTICES

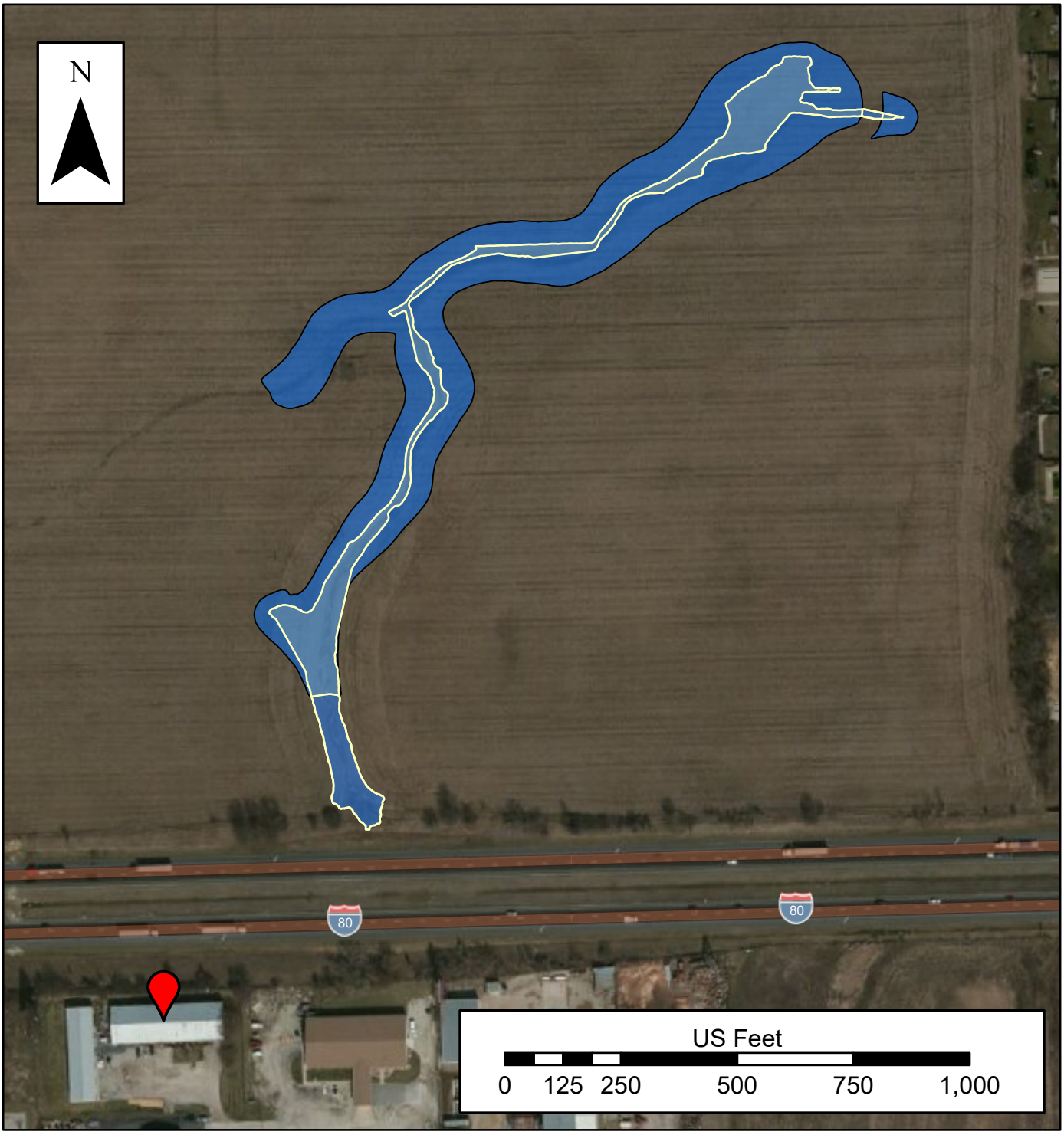
TO-TOLIN:	F0069-0002AI001
Site Name:	Joliet Chemical Fire PRP Cleanup
Site City, State:	New Lenox Township, Illinois
Site Project Manager:	Andre Baker
EPA OSC:	Jacob Hassan

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N= Not Used	N/A= Not Applicable	Y = Yes Implemented	**Comments Section** Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Energy				
Use of Energy Efficient Equipment				
Computer Equipment (FEMP/Energy Star)			X	Energy Star laptops
Installation of Electric Service	X			N/A
Reduce Carbon Emissions from Transportation				
Use Internet Based Meetings/Conferences			X	Teleconference and email between EPA, START and PRP contractors
Maximize Carpooling		X		One START member on site at a time
Use of Local Labor/Suppliers/Waste Disposal Facilities (50 mile radius)			X	Majority of waste disposal facilities located within 50 miles of site
No idling, except for extreme weather conditions			X	Idling not necessary
Use of Alternative Fuels, if available within 10 miles	X			Vehicles not equipped for alternative fuel
Properly Inflated Tires			X	
Email Small Files (less than 8MB)			X	All files transmitted electronically
Reusable Electronic Storage Media or the Cloud			X	Files stored digitally
Water				
Use of Low Flow Sampling Pumps		X		
Waste				
Use of Local Recycling Programs		X		Recyclable materials not generated
Use of Rechargeable Batteries		X		All monitoring equipment used rechargeable batteries
Recycling – Other		X		
Plastic Reduction		X		
Reuse of Resources		X		Supplies reused when possible
Direct Push Boring		X		
Materials				
Printing when Required				

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N= Not Used	N/A= Not Applicable	Y = Yes Implemented	**Comments Section** Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Double-sided Printing			X	Used
100% post-consumer recycled paper			X	Used
Land & Ecosystems				
Minimize Disruption to Natural Vegetation		X		Limited natural vegetation
Use of Non-invasive Investigation Techniques			X	Conducted non-invasive sampling activities
Environmentally Preferred				
Green Procurement				
Environmentally Preferred Vendors			X	Field Environmental Instruments
Green Lodging/Hotels		X		Lodging not required for project
Use of Green Laboratories			X	ALS is committed to sustainable activities

ATTACHMENT 1
AFFECTED PROPERTY #4 IMPACTED AREA DELINEATION

MGP Industries Spill & Buffer Delineations



MGP Industries Location
Original Spill Zone 8/21/19
Harvest Outline 11/7/19

Original Spill: 1.227 Acres
Unharvested Area: 4.413 Acres

ATTACHMENT 2
POTABLE WELL WATER SAMPLING OUTREACH LETTER

DATE, 2019

Name
Street
City, Illinois ZIP

RE: Request to grant access for the collection of a representative groundwater sample from the potable well located on the XXX Street, New Lenox, Illinois property.

Dear Resident:

Schrack Environmental Consulting (SECI) and the United States Environmental Protection Agency (USEPA) are respectfully requesting you to allow for the collection of a representative groundwater sample from the potable well located on your property.

SECI and USEPA are working with the Will County Health Department on assessing the potential impacts from a fire which occurred on August 3-4, 2019 at MPG Industries, Inc., located at 20604 South Amherst Court, Joliet, Illinois. Run-off from the fire migrated through a culvert beneath Interstate 80 and into a farm field near your property. Your property has been determined to be within 400 feet of the run-off pathway, which is the setback zone for potable wells in Illinois.

Prior to the sampling, the process would be explained in detail to make sure you understand and agree to the sampling. Samples would be analyzed for VOCs (Volatile Organic Compounds) and Semi – Volatile Organic Compounds (SVOCs), which are indicators for the materials released from the fire. The process would be conducted and documented by a Licensed Professional Engineer in accordance with procedures prescribed by Illinois EPA and guidance provided by the Illinois Department of Public Health. All samples will be analyzed at an Illinois Certified laboratory.

Upon receipt of the testing data, SECI will provide you with a letter report providing all documentation and a summary of the sampling results. The report will also include a complete copy of the analytical testing report provided by the laboratory.

If you are willing to grant access to allow the proposed sampling, please sign and return one copy of this document. SECI will then contact you to arrange for the date and time of the sample collection.

Please feel free to contact me at (815) 254-4007 if you have any questions concerning this proposal.

Sincerely,

Ronald W. Schrack, P.E.
President
SECI
PN: 19921.01